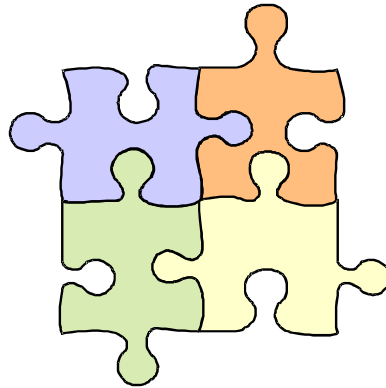# Data Quality

Tips and Tricks

Kennell and Associates

Objectives

1. List several important MHS initiatives that rely upon good MTF data

2. Identify the major MTF-level data products

3. Identify common MHS Data Problems

4. Describe the MDR and M2

5. Utilize M2 Standard Reports to analyze DQ issues

Transformation of the MHS into a data-driven enterprise!

Then:
Rudimentary funding
Closed organization
Production-focused

Now:
Productivity
Population Health
PPS & Business Plans
Balanced Scorecard
MCS Contracts / TFL

Data-Based Clinical Initiatives

Data-Based Clinical Initiatives

- Disease Management Initiatives
  - Asthma, Diabetes and Congestive Heart Failure
  - Identification of high-risk patients using SIDR, SADR, Pharmacy and Claims data
  - MCS Contractors receive a list of patients, who must be contacted for enrollment into DM programs.
- Pop-Health Portal
  - Preparation of <u>action lists</u> for providers or primary care managers
  - Uses SIDR, SADR, Laboratory, Radiology, Pharmacy and Claims
  - HEDIS measurement imbedded in MCS contractor award fees

Data-Based Financial Initiatives

Data-Based Funding

- Prospective Payment System
  - Workload-based O&M funding for care provided over and above FY03 baseline. (Will re-baseline at some point soon).
  - Covers inpatient and ambulatory care currently.
  - **Unreported = unearned!**
  - Funding rates based on <u>allowed amounts</u> in the local private sector; does not rely on costs
  - Inpatient earnings are based on days for mental health, and "RWPs" for all other care
  - Ambulatory earnings are based on RVUs and provider specialty code
 - PPS Policy continues to evolve.

Sample MTF Earning Rates

DMIS ID	DMIS ID Name	RWP Value	MH Day Value	RVU Value	Primary Care RVU Value	Surgical RVU Value
0001	FOX AHC-REDSTONE ARSENAL	$7,953.92	$ 695.74	$ 71.07	$ 72.40	$ 60.85
0014	60TH MED GRP-TRAVIS	$9,572.28	$ 837.30	$ 73.76	$ 75.14	$ 63.15
0032	EVANS ACH-FT. CARSON	$8,193.43	$ 716.69	$ 71.58	$ 72.92	$ 61.28
0033	10TH MED GROUP-USAF ACADEMY CO	$8,193.43	$ 716.69	$ 71.58	$ 72.92	$ 61.28
0066	89TH MED GRP-ANDREWS	$8,228.15	$ 719.73	$ 76.31	$ 77.73	$ 65.33
0067	NNMC BETHESDA	$8,618.92	$ 753.91	$ 76.31	$ 77.73	$ 65.33
0110	DARNALL AMC-FT. HOOD	$7,493.71	$ 655.48	$ 70.20	$ 71.51	$ 60.10

Inpatient PPS Earnings Example:

MTF XXXX	Workload	Rate	Earnings
Bed Days for Mental Health	565	$ 700	$ 395,500
RWPs for all-other stays	9,877	$ 9,000	$ 88,888,950
Inpatient Earnings			$ 89,284,450

MTFs code the SIDR & SADR
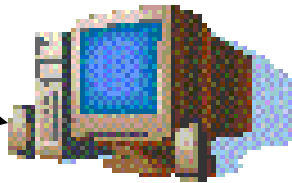
MDR adds RVUs and RWPs

HA Rates

Data-Based Funding

- Prospective Payment System
  - PPS dollars are earned at MTF level
  - But distributed to the Services for them to obligate as they deem necessary.
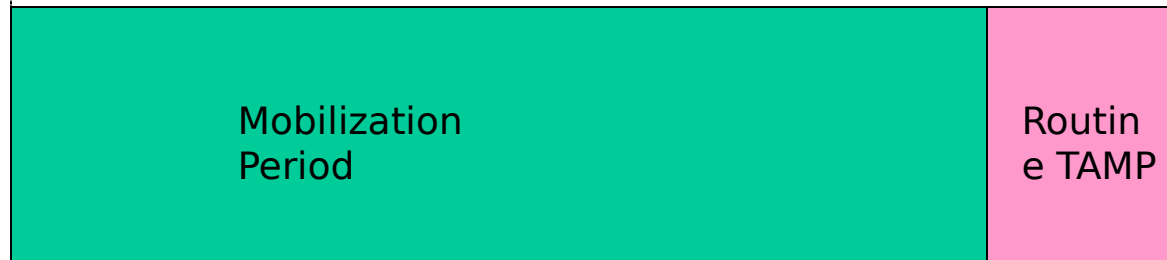 - PPS earning rates and actual earnings can be obtained via M2

Data-Based Funding

- GWOT Funding associated with new benefits for guard/reserve in the Defense Authorization Act of 2004
- Additional funding on top of DHP to cover the costs
  - Funding based on actual claims & costs of care at MTFs
- Significant increase in the length of eligibility for members and their family.
- Early eligibility, screening period and extended transitional assistance
  - Up to 6 month increase per activation
- TRICARE Reserve Select enrollment program offers TRICARE eligibility for a premium
  - Changes in eligibility requirements over time.
  - Data processing issue in MDR currently causes understatement of enrollment.

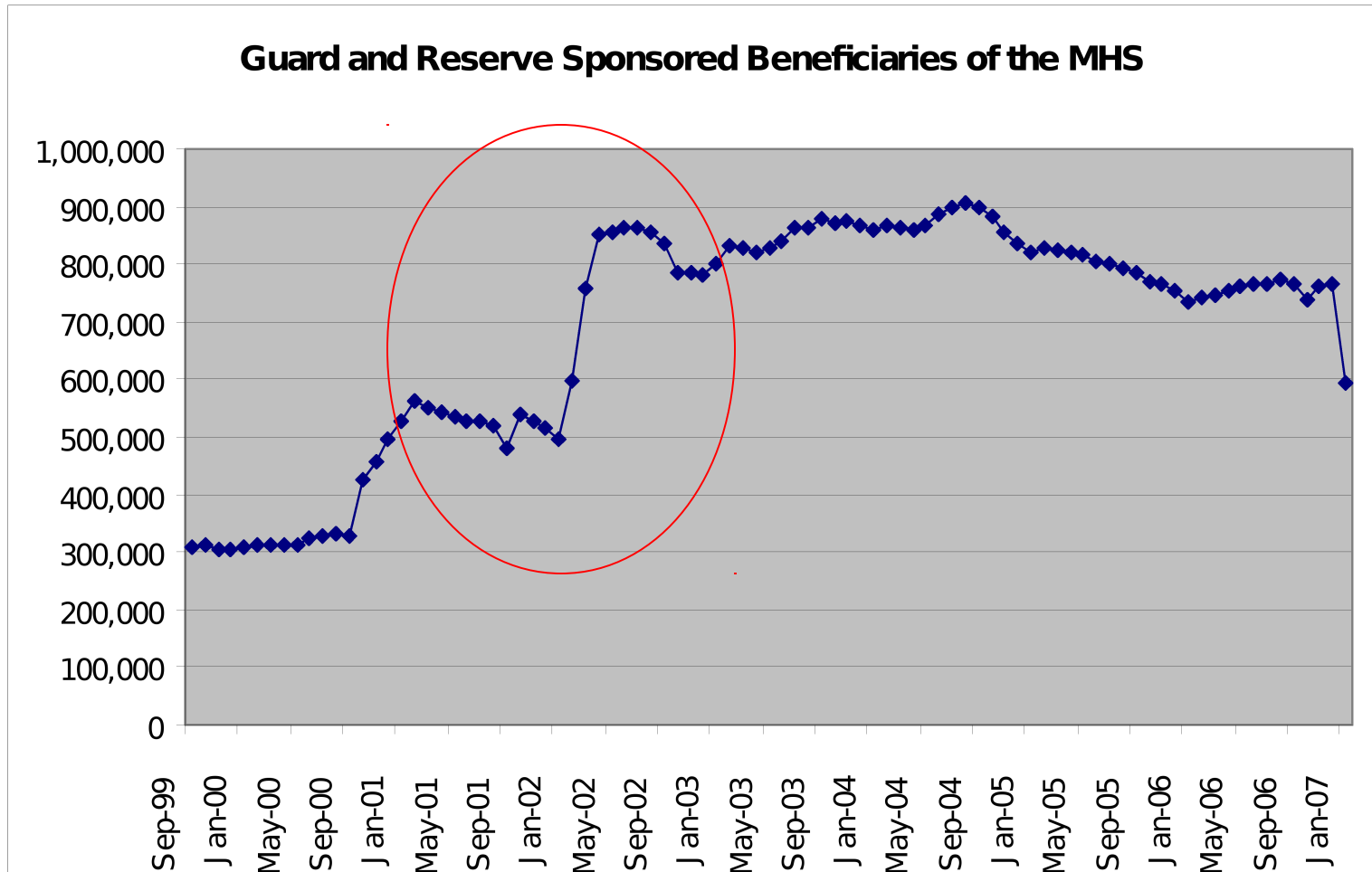# November 2004 +

New Way

Early Elg 60 days	Screen	Mobilization Period	Routine TAMP	Extra TAMP 2-4 months

Old Way

Mobilization Period	Routine TAMP

Lengthened period of eligibility!!!

Growth in Eligible Population with Guard/Reserve Sponsors

Guard and Reserve Sponsored Beneficiaries of the MHS

Source: M2

TRS Enrollments
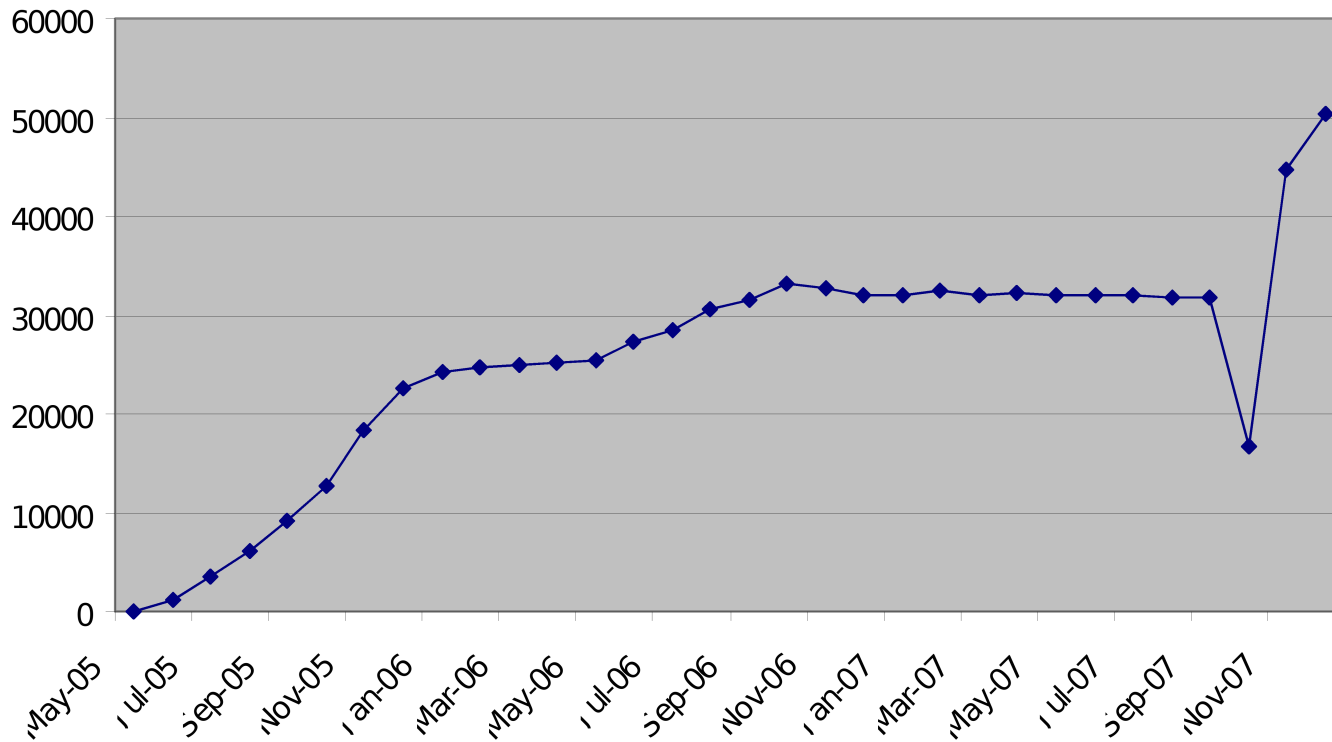
None would have been eligible prior to TRS!

- Program implemented in April 2005

- Major program changes @ FY08

- MDR Program Bug – being corrected currently. Numbers generally 'about right' but too low; especially at start of program & also FY08.

Data-Based Funding

- TRICARE for Life
  - Separate fund provides $$$ to care for Non-AD / ADFM Medicare eligibles
  - Medicare Eligible Retiree Health Care Fund (MERHCF)
  - MTF $$$ (earnings) based on SIDR, SADR, PDTS.
  - Medicare Eligibility from DEERS (from CMS)
  - More from Mr. Moss later in course

Number of Beneficiaries Eligible for the MERHCF

MERHCF Eligible Beneficiaries
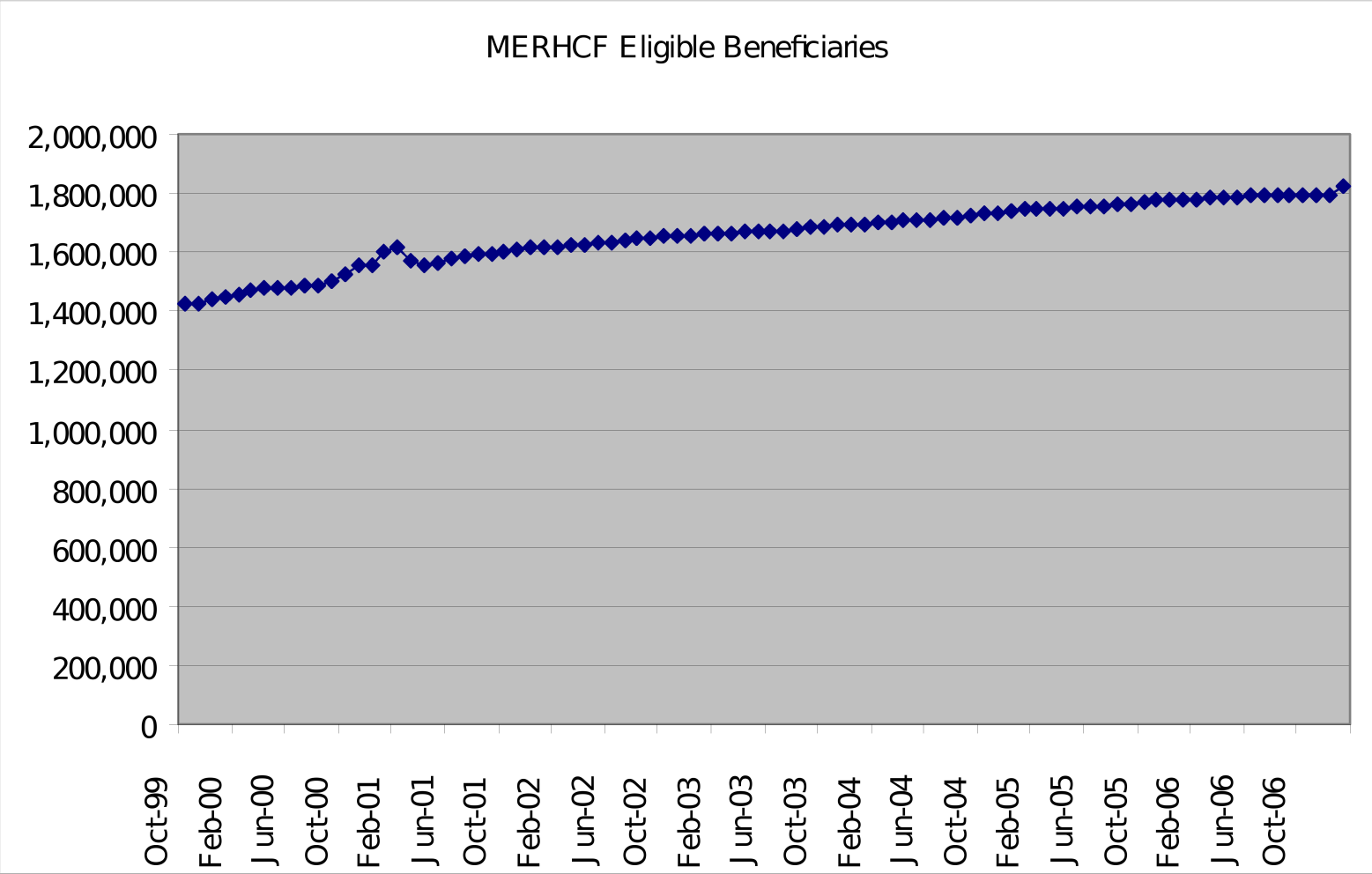
Other Funding

- Third Party Collections
  - CMAC for outpatient and ancillaries
  - DRG based billing for inpatient
  - Billing based on CHCS or AHLTA coding

External Business & Data

Data-Based Contracts

- T-Nex TRICARE Managed Care Support Contracts
  - 3 U.S. "At-Risk" contracts
  - ~2 Billion Dollars per Region "at risk"
  - Enrollment Processing and PCM Assignment
  - Claims Payment
  - Managed Care & Much More!
  - Ongoing provision by TMA of SIDR, SADR, PDTS, Claims and DEERS data
  - Data used to negotiate prices for subsequent year of contract. Important financially

Data-Based Contracts
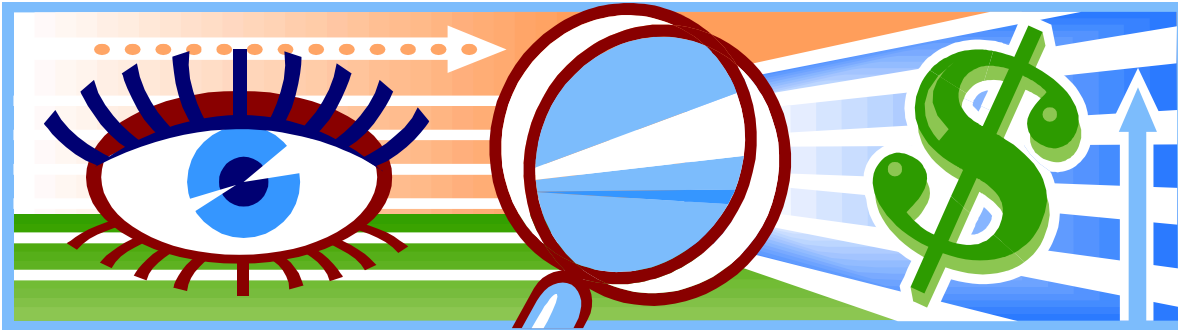
- TRICARE Global Remote, TRICARE Overseas Prime, TRICARE for Life
  - Claims
- TRICARE Retail Pharmacy
  - Claims & PDTS
- TRICARE Mail Order Pharmacy
  - Claims & PDTS

Data-Based Contracts

- TRICARE Dual Eligible Fiscal Intermediary Contract (MERHCF)
  - Claims
- Designated Provider
  - Managed Care (Health Care)
  - Enrollment
  - Capitated with Risk Adjustment

Focus on Data Quality

Data Quality and the MHS

- TRICARE Senior Prime
  - Very poor audits
- DoD Financial Statement Problems
  - Poor data quality cited
- Data problems cited repeatedly with MCS Contract 'disputes'

Significant focus on DQ at TMA and Services.

Data Quality and the MHS

- Data Quality Management Control
- Data Quality Managers
- Data Quality Course
- Data Quality IPT (Functional)
- Commander's statements and review lists
- Data Quality Standard Reports for M2

Data Quality and the MHS

- Redesign of IM/IT Process
  - Functional responsibility for business rules
  - Requirements vetted through IM (Services, HA/TMA, DEERS, Others)
  - Requirements documented
- Modernization of data flows and architecture for business systems
  - Reduce burden on the source systems
  - Process it once, ship it out where needed!

Inpatient Data Record Flow 10/98
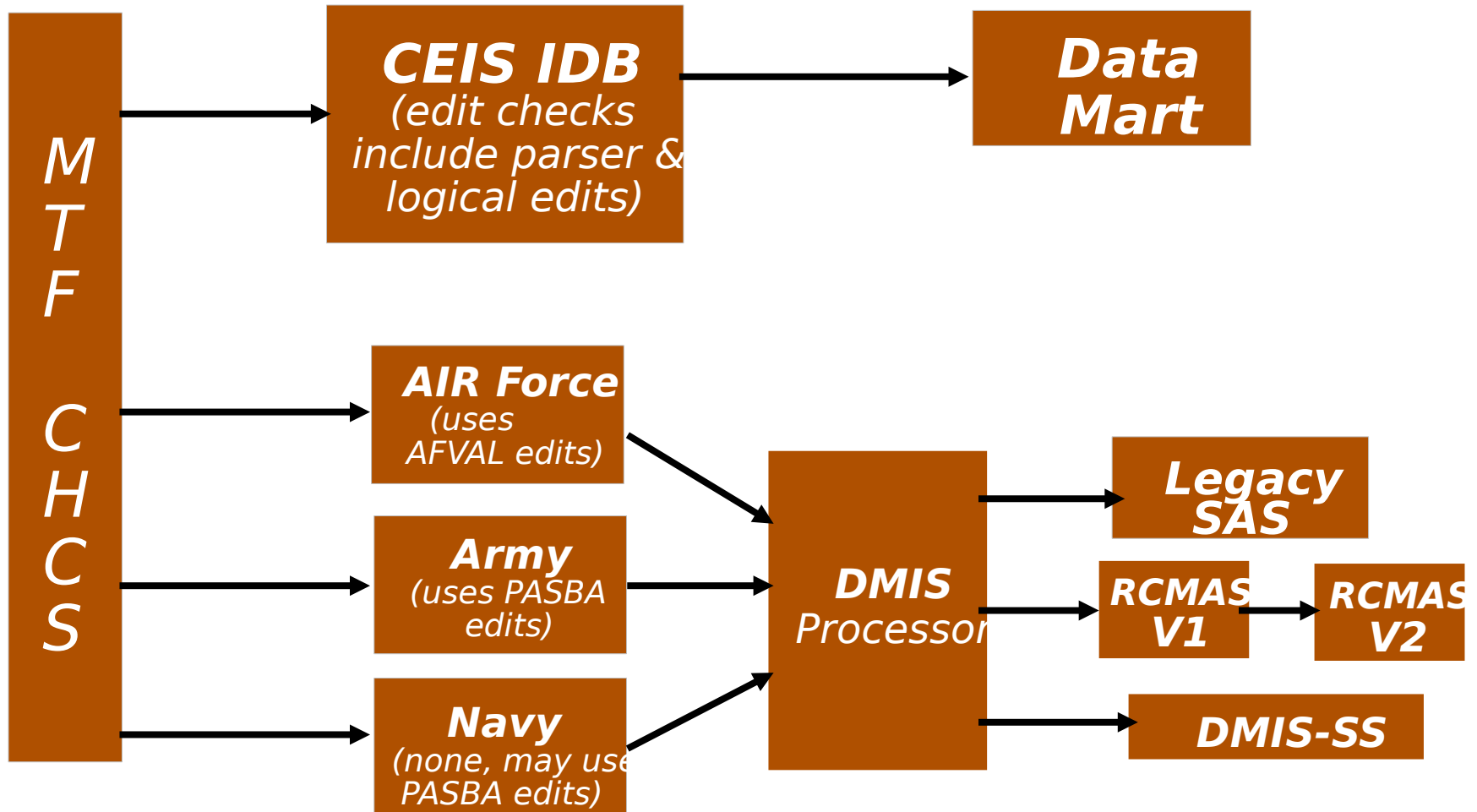
Inpatient Data Record Flow 4/99

Inpatient Data Record Flow Today

MTF CHCS

MDR

Data Mart

Data Mart
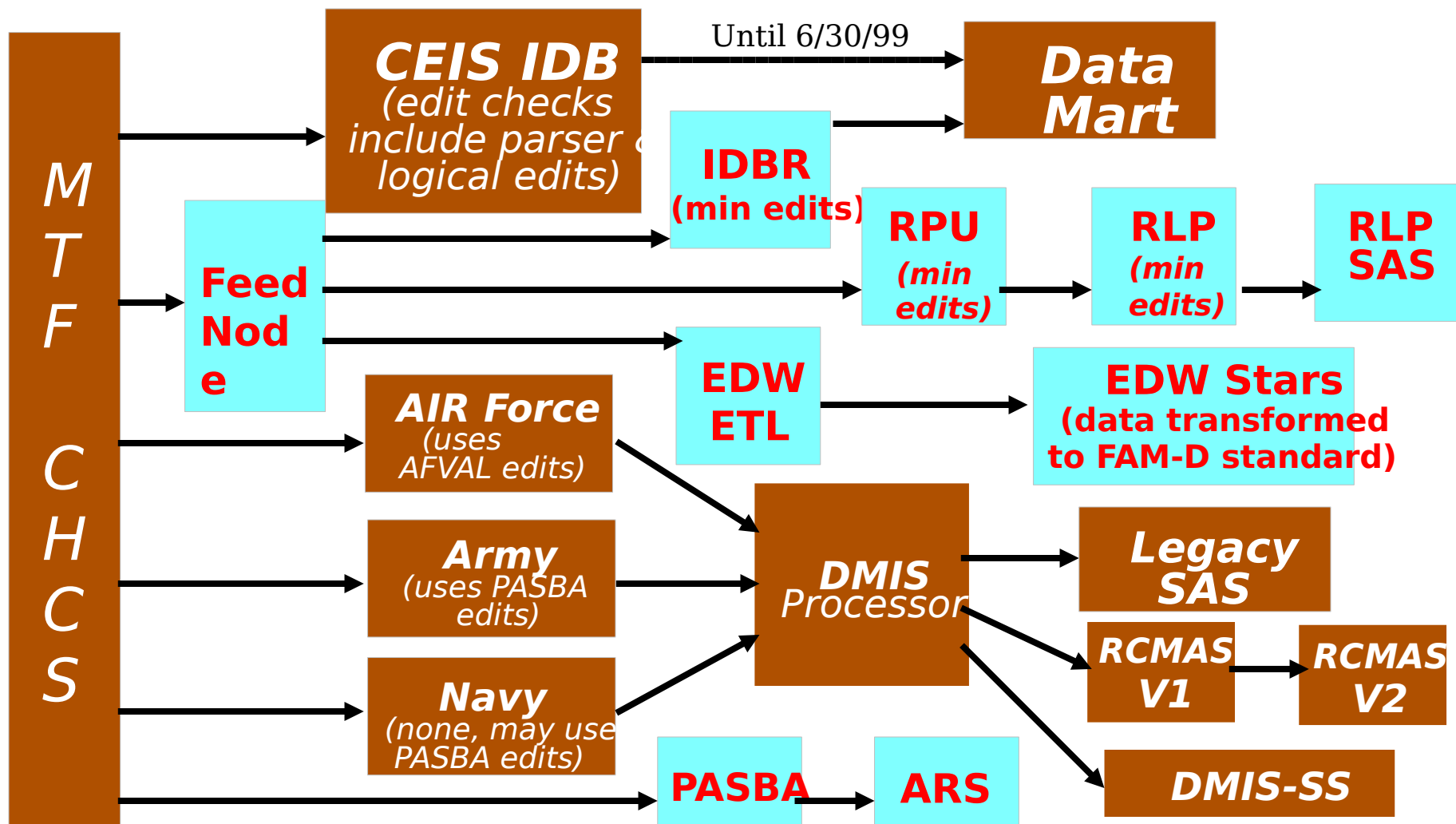
Simplicity..........
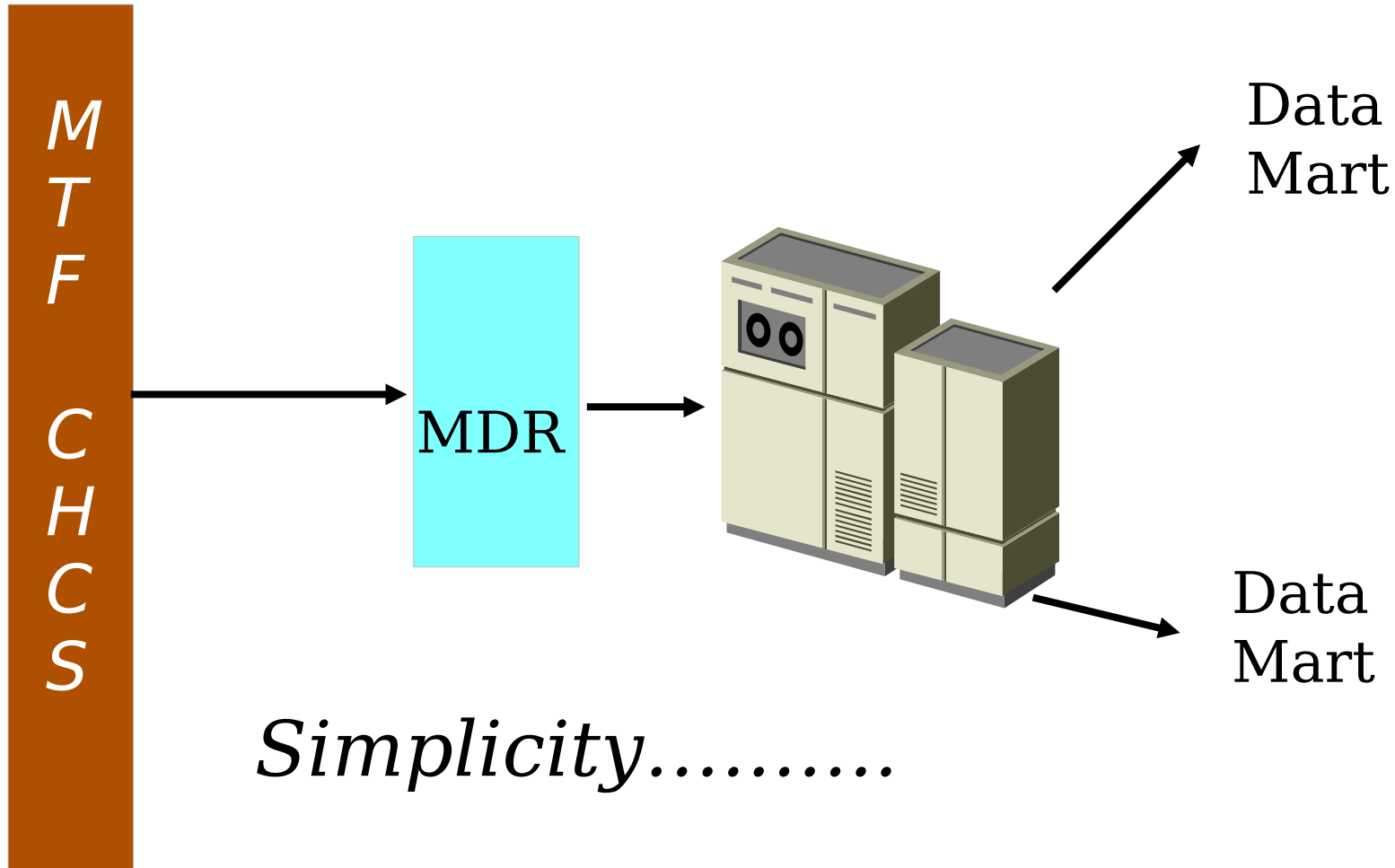
Business Systems Now Use a More Modern Information Systems Model

Type	Purpose	Periodicity	Quality	Example
Transactional	Run the business	Real-Time	No time to "clean"	CHCS
Data Warehouse	Store, process	Batch	Fix and standardize	MDR
Data Mart	Use the data	Batch	Receives data from warehouse	M2

Types of Systems

Real-Time	Periodic Updates	
Transactional	Warehouse	Data Mart
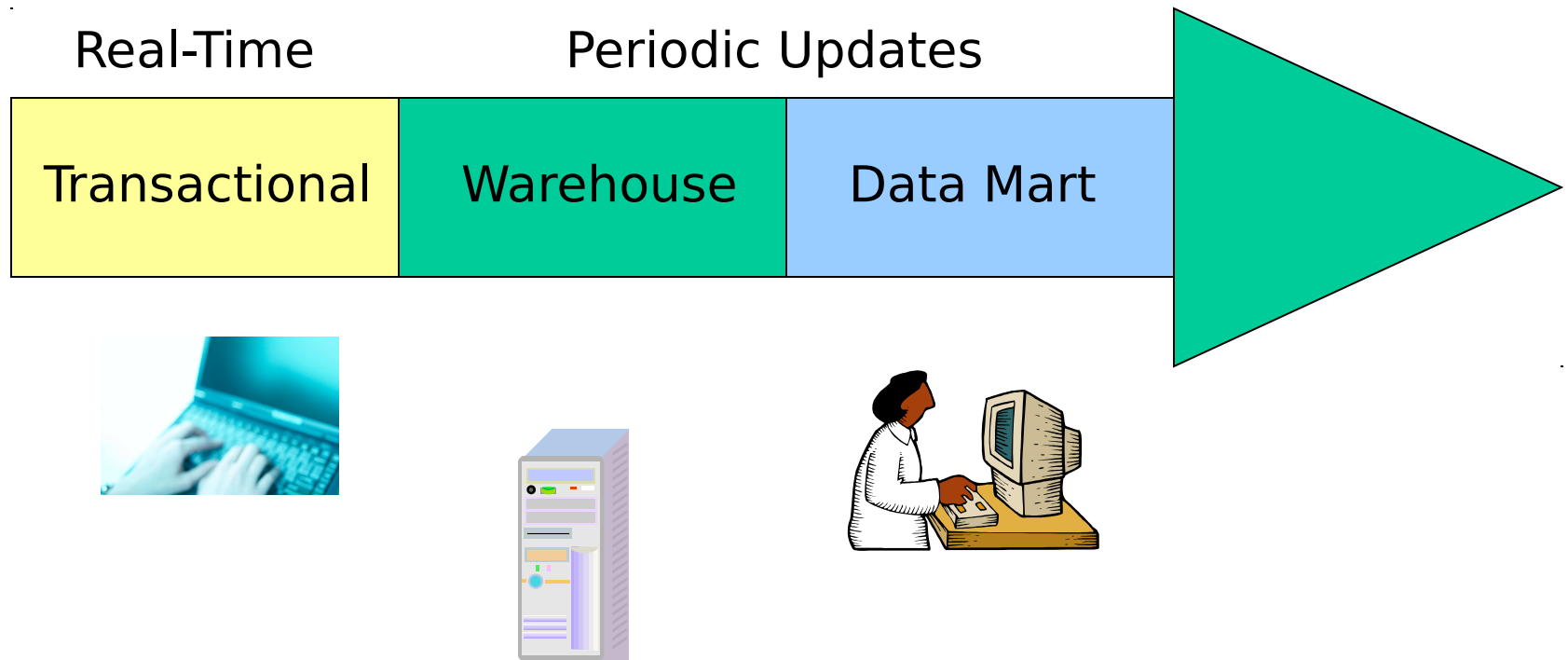
Data Quality and the MHS

- Development of MHS Data Repository
  - "Home-grown" business data warehouse
  - Developed primarily by functionals in response to Y2K issues; never intended to stick......
  - Still operated today......

- MDR receives data from transactional systems and other data marts
  - Processes, cleans, archives & derives data elements
  - Data files stored in a secure, flexible environment
  - Limited user access

- MDR provides data to data marts and to services.
  - Most users access MDR data through a data mart called "M2"

Basic Data Flow

Data sent to MDR 24/7

Aurora

CHCS

DEERS

Contractors

Others

MDR Feed Node

Batches

Weekly

Monthly

MDR Processing, File Storage & Limited Access

M2

1300+ users access in M2
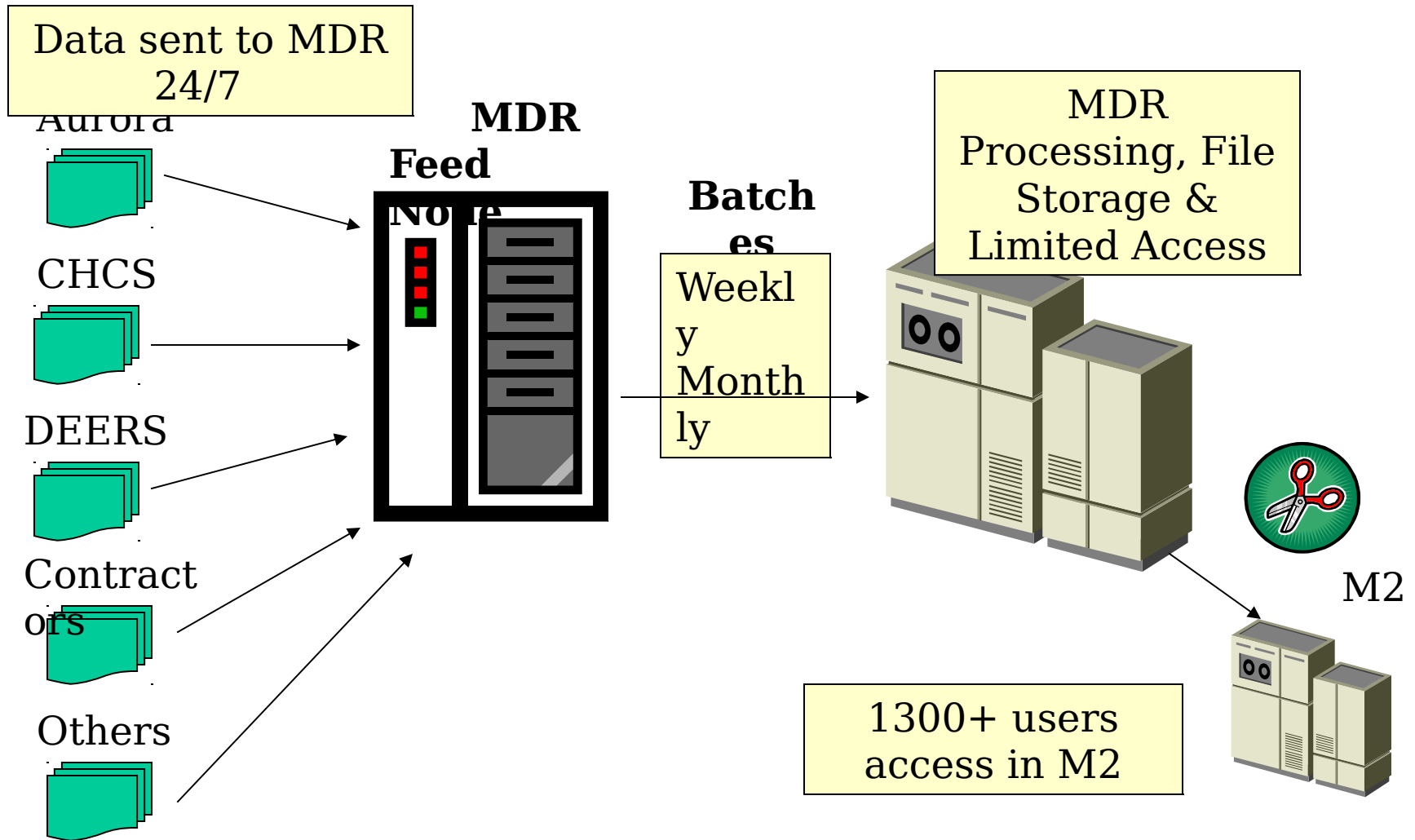
Preparation of MDR Files

- MDR is the "workhorse" – where most of the processing of data occurs. Generally includes:
  - Archiving and Storage
  - Person Identification enhancement
  - Application of DEERS attributes
  - Addition of market concepts (i.e. catchment)
  - Addition of DMISID attributes (i.e. enrollment MTF Service, etc)
  - Grouping (DRG, APC, etc)
  - Addition of costs and weights (RVUs, RWPs)
  - And much, much more………

The MHS Mart

- The "M2":
  - Very popular data mart
  - Contains a subset of MDR data
  - Many data files from MTFs + other data, too!
  - Significant functional involvement in development and maintenance
  - 1400+ users at all levels in the MHS
  - Ad-hoc querying or "Corporate Reports"

Types of Systems

- The "M2":
  - Many corporate reports designed for data quality managers; described throughout this briefing
  - Reports are written to resemble DQ metrics wherever possible
  - Additional reports about emerging data problems are also included
  - Report documentation is provided in your handouts
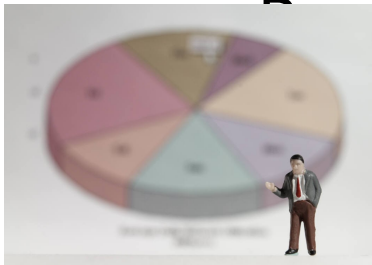
Types of Systems

- The "M2":
  - Corporate docs + ad-hoc M2 queries = flexible environment to analyze and diagnose data quality
  - Uses the same record identifiers as the sources of data, so that once problem records are identified, they can be fixed locally and retransmitted.
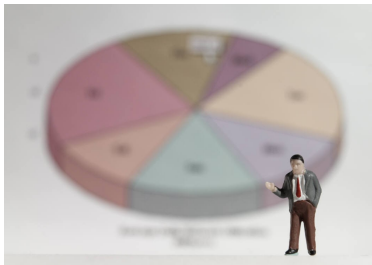
Remainder of Presentation

- Description of systems
- Output data files
  - Description
  - Major Uses, Examples
  - DQ Issues or Considerations
  - Use of M2 Corporate Reports to aid in DQ Management at the MTF

The MTF Data Environment

MTF Data Environment

- Many systems at each MTF
  - Service specific systems
  - TMA Systems
- Service Systems provide data to some TMA Systems
  - Personnel
  - Financial
- Recent / Upcoming Developme
  - Human Resources

MTF Data World!

- <u>Composite Health Care System (CHCS</u>

    - Primary operational system supporting MTFs

    - Hospital Management / Administration

    - Clinical Coding

    - Communicates with DEERS, other MTF-level systems

    - 100+ separate systems with no common database

    - <u>Extremely important to MTF operations</u>…

CHCS

Data captured as a part of doing business

Appointing

Registration

Admitting

Billing (Inpat)

Ordering Ancillaries

Utilization Review

Workload Capture

Etc......
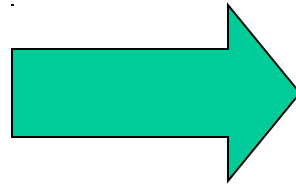
Real time data store about health care delivery, revenues, providers, patients, clinics and wards, etc......

LOCAL DATA ONLY!

MTF Data World!
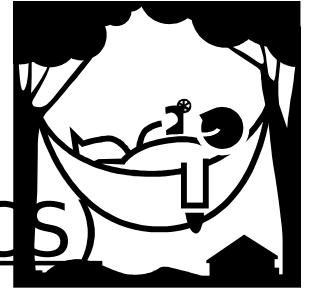
- <u>Composite Health Care System (CHCS)</u>

  - Legacy Status

  - Much of the functionality of CHCS is being built in other systems

  - Enrollment Processing, Primary Care Manager Assignments now done with DEERS Online Enrollment System (DOES)

  - Most ambulatory care is captured in AHLTA instead of the CHCS ambulatory data module

  - Referral, Appointing underway

Use of AHLTA is improving, but
still missing ER and APV

% of Outpatient SADRs captured in AHLTA
by type of clinic

Legend: B Codes, ER, APV

CHCS is the local "Hub"

Billing

Financial

CHCS

DEERS

Pharmacy

CDR

AHLTA
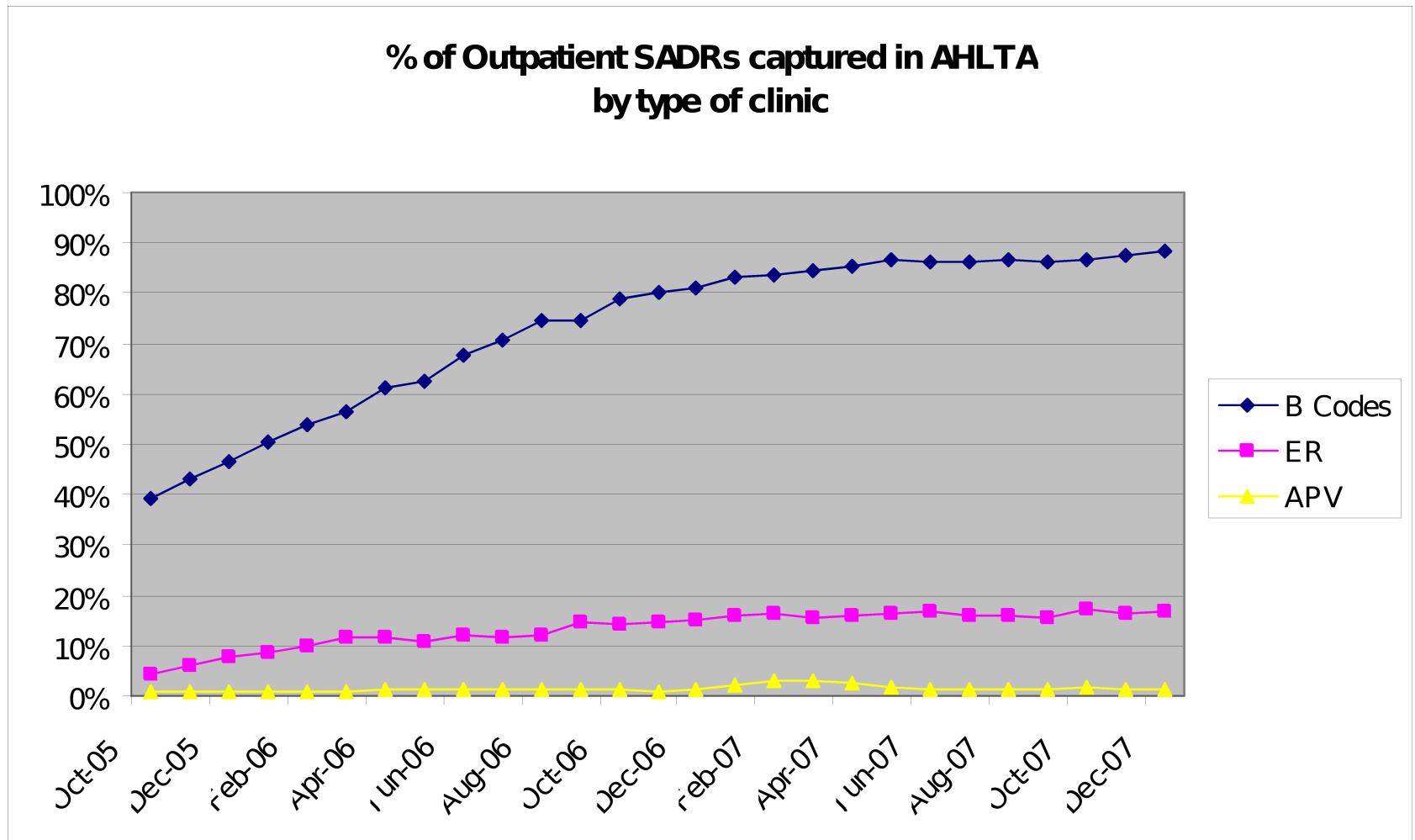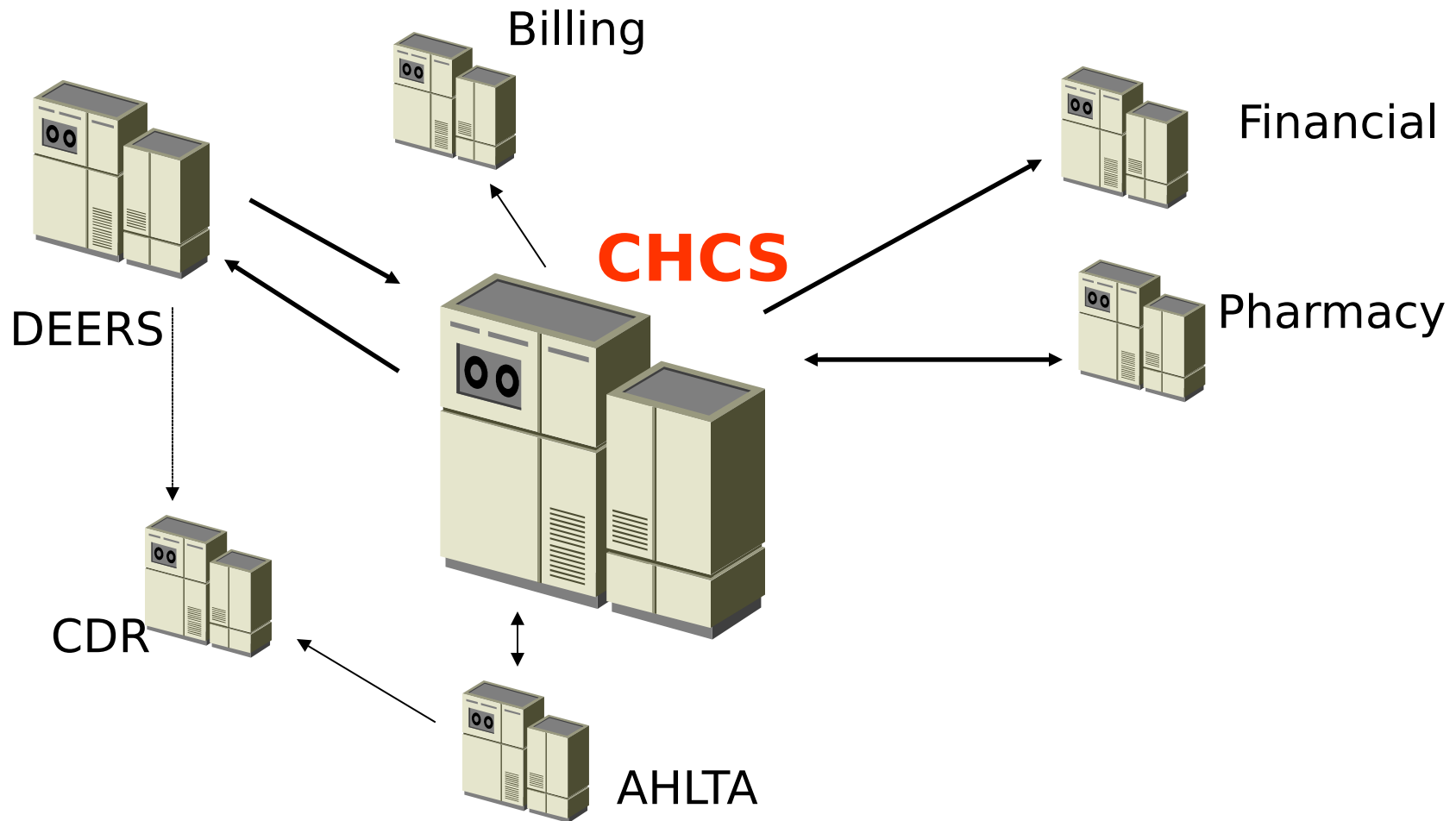
CHCS Data Quality

- CHCS Hosts serve local areas only.

- CHCS plays a central role in optimizing MTF data quality.

- MTFs benefit from quality data.

    MTF will run smoother!

    Better information for better healthcare delivery

    –All other systems that receive CHCS data will benefit

CHCS Files and Tables

- CHCS contains many tables associated with specific functionality.. For example

  - Appointment file used to appoint patients.

  - Patient file is used to keep track of basic information about beneficiaries served

  - Order files contain information about ancillary services ordered within MTFs.

- Data from different CHCS files are often joined together.

CHCS Configuration Management

- Configuration Management
  - "Version control"
  - Applies to software and code sets
  - Avoid problems by ensuring that updates are loaded properly..
  - Timing is especially important

CHCS and Data Quality

- Software Maintenance Updates
  - Changes in CHCS can affect all files and/or systems that receive data from it
  - Software testing assumes users have most recent versions operating
  - Sites with older software can get "surprised" with data problems
- Reference Tables and Code Sets
  - Examples: DMIS ID, ICD-9, MEPRS, CPT/HCPCS

Symptoms of CM Problems

- Whole "types" of information missing from a data record

  –Enrollment data

  –Provider data

  –Patient data

- Usually indicates that files did not 'join' properly when extracted from CHCS

Symptoms of CM Problems

- Large numbers of "rejections" of data being sent from one system to another

    - If one systems receives a code from another that it isn't expecting, it may reject records

    - Recently occurred….

    - Some systems allow "hand-jamming" of data when this happens! Increases level of effort and error rates.

Avoiding CM Problems

- Follow Service guidance for updates to software and tables

- <u>Plan</u> for releases of new software or code sets

- <u>Coordinate</u> among all systems affected

- <u>Document</u> procedures

- <u>Monitor</u> implementation

- Use available resources (Help Desk, Service POCs, Peers)

CHCS and Data Quality

- Files and tables form the underlying basis of CHCS. Problems with them permeate the entire system.
- <u>Provider Tables</u>
  - Fake provider IDs
  - Duplicate providers
  - Bad specialty Codes
- <u>PCM Tables</u>
  - Capacities; Specialties

CHCS and Data Quality

- <u>Patient File</u>
  - Duplicate Records in Patient Registry
    - Utilities existed for this. Plan to run routinely. Monitor. Record.
  - Incorrect patient category code
    - Patients can have more than one benefit
    - Patient category code should apply to the particular benefit being used at the time of healthcare delivery.
    - (Think reservist who is married to an active duty service member)

Patient ID	Pat Cat	Admission Date	Discharge Date	DRG
111111111	**Reservist on AD**	10/2/2007	10/4/2007	143 - Chest Pain

Reservist married to an active duty service member.

Patient ID	Pat Cat	Encounter Date	Clinical
111111111	**Army Dep of AD**	10/31/2007	Cardiology

CHCS Files and Tables

- CHCS provides data to many other local systems

  Example: Tabulated workload counts to financial system

- CHCS provides many standardized extracts to corporate systems

  - Extracts are extremely important; used at all levels of the organization

  - Often include data put together from many separate CHCS files.

  - Sent via FTP to MDR and services

CHCS Data Products

Name	Description	Acronym
Standard Inpatient Data Record	Inpatient Hospital Records	SIDR
Appointment	Appointment records for outpatient visits	None!
Referral	Referrals for specialty care	
Standard Ambulatory Data Records	Outpatient visit, t-con or inpatient rounds records	SADR
Ancillary Lab and Rad and Rx	Procedure records	None!

MTF Hospital Data

Standard Inpatient Data Record

- What does a SIDR represent?

- How is the information collected?

- Timing?

- MDR? M2?

- How is it used?

- Using M2 to identify DQ problems at your MTF

Standard Inpatient Data Record

- <u>Each SIDR represents a hospital stay at an MTF</u>
  - (Some SIDRs exist for inpatient care at line hospitals, others)
  - Created from data collected during and after the stay, and from existing files/tables in CHCS
  - There are roughly 250,000 SIDRs per year
  - Policy is that a SIDR record must be completed w/in 30 days of discharge.

Standard Inpatient Data Record

- Information on the SIDR
  - Patient Identifier and Demographics
  - Sponsor Information
  - Diagnosis and Procedure Codes
  - Admission & Disposition Dates, LOS
  - DRG
  - Enrollment Information from DEERS check at time of admission
  - Administrative data, etc…

Preparation of SIDR Files in MDR & M2

National Capital Area

Portsmouth

Colorado Springs

Etc....

MDR

MDR SIDR File

M2 Feed

SIDR processing begins on the 10th of each month.
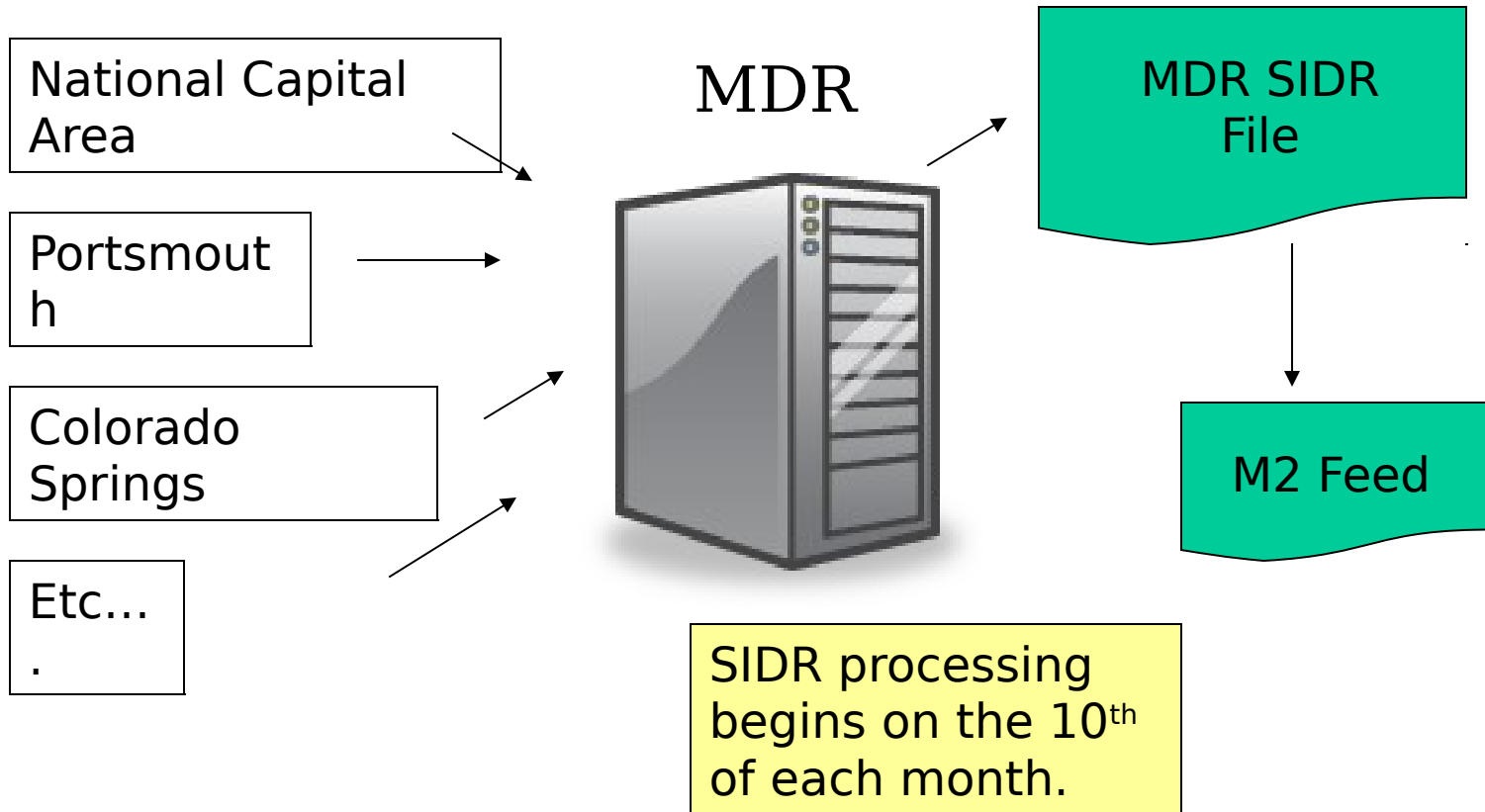
Standard Inpatient Data Record

- MDR Processing of SIDR
  - Person identification standardization
  - Application of DEERS attributes (including application of retroactive changes) & GWOT data
  - DRG Grouping
  - Addition of relative weighted products (RWPs), PPS data
  - Costing
  - AHRQ Prevention Indicators
  - Additional field derivations
  - Application of update records
  - Preparation of data for M2
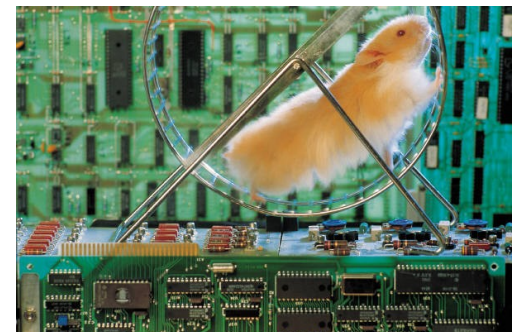
Standard Inpatient Data Record

Uses of SIDR

- SIDRs can be tabulated to generate important management information
- SIDRs can also be used at person level; to improve health care, identify potential case management candidates, etc.

Example of Tabulated SIDRS:

Top 10 DRGS performed by MTFs in FY07

DRG	DRG Description	Discharges
391	NORMAL NEWBORN	34,053
373	VAGINAL DELIVERY W/O COMPLICATING DIAGNOSES	30,350
630	NEONATE, BIRTHWT >2499G, W/O SIGNIF OR PROC, W OTHER PROB	12,297
371	CESAREAN SECTION W/O CC	10,021
143	CHEST PAIN	7,065
372	VAGINAL DELIVERY W COMPLICATING DIAGNOSES	6,521
359	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY W/O CC	3,883
430	PSYCHOSES	3,064
370	CESAREAN SECTION W CC	2,817
183	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS AGE >17 W/O CC	2,751

Example of Tabulated SIDRS:

Discharges from MTFs in FY07, by enrollment program

Enrollment Program	2004	2005	2006	2007	2008
Prime	168,138	174,797	167,718	170,708	15,001
Other	69,068	54,576	53,602	52,815	6,892
Plus	25,423	24,653	23,107	23,062	1,840
Reliant	18,616	17,962	17,111	17,187	1,936
Overseas Remote	70	138	152	151	21
Designated Provider	38	49	56	36	2
Total	281,353	272,175	261,746	263,959	25,692
% Prime	60%	64%	64%	65%	58%

Example of Tabulated SIDRS:

Trend in C-Section Rate for MTFs

DRG	Description	2004	2005	2006	2007	2008
370	CESAREAN SECTION W CC	2,967	2,830	2,783	2,817	283
371	CESAREAN SECTION W/O CC	9,438	9,368	9,402	10,021	1,021
372	VAGINAL DELIVERY W COMPLICATING DIAGNOSES	6,706	6,373	6,229	6,521	653
373	VAGINAL DELIVERY W/O COMPLICATING DIAGNOSES	31,801	31,109	29,716	30,350	3,065
374	VAGINAL DELIVERY W STERILIZATION &/OR D&C	696	596	504	424	52
375	VAGINAL DELIVERY W O.R. PROC EXCEPT STERIL &/OR D&C	52	58	112	69	5
	Total Deliveries	51,660	50,334	48,746	50,202	5,079
	C/S Rate	24%	24%	25%	26%	26%

Example of Person Level Use of SIDRS:

Multiple admissions for the same DRG.. Potential for case or disease management. AD Dependent; Age 5

Person ID	Admission Date	Discharge Date	BenCat	Age	DRG	DRG Desc	
125060XXXX	12/26/2002	12/27/2002	DA	1	098	BRONCHITIS & ASTHMA AGE 0-17	
125060XXXX	11/13/2006	11/15/2006	DA	5	098	BRONCHITIS & ASTHMA AGE 0-17	
125060XXXX	1/14/2007	1/15/2007	DA	5	098	BRONCHITIS & ASTHMA AGE 0-17	
125060XXXX	2/5/2007	2/6/2007	DA	5	098	BRONCHITIS & ASTHMA AGE 0-17	
125060XXXX	5/2/2007	5/4/2007	DA	5	098	BRONCHITIS & ASTHMA AGE 0-17	

Important Data

Key Data Elements	Why
Patient ID	Finding patients, DEERS App, Disease & Case Mgmt, MERHCF, GWOT, PPS, Balanced Score Card, Billing
Patient Category Code	Assignment of Beneficiary Category, Billing, Line of Duty
Diagnosis Codes & Procedure Codes	DRG assignment, RWPs, identification of records for certain conditions or procedures, billing
Admission and Discharge Dates	Length of stay, RWPs, billing
MEPRS Codes	Application of Costs, MERHCF, GWOT

Standard Inpatient Data Record

Data Issues

- Completeness or Timeliness: completed records due 30 days after disposition
  - IMC Checklist Item
  - Standard Report available comparing SIDRs reported for each MTF to other workload sources (WWR/MEPRS)
  - Should be 100% except for most recent months
  - Check M2 data status table for timing to interpret properly

Compliance and Timeliness Report

<u>tma.rm.dq.dcip.rept.comp</u>:

- – Updated once per month
- – Within a few days of M2 update
- – Can be updated by users also

MTF & Attributes

FY & FM

SIDR Dispositions

WWR Dispositions

MEPRS Dispositions

% Complete

File   Edit   View   Insert   Format   Tools   Data   Analysis   Window   Help

File Menu		
New...	Ctrl+N	
Open...	Ctrl+O	
Close	Ctrl+W	
Save	Ctrl+S	
Save As...	F12	
Save As HTML...		
Save All		
Publish To	►	
Send To	►	
Retrieve From	►	
Properties...		
Page Setup...		
Print Preview...		
Print...	Ctrl+P	
1 tma.rm.dq.dcip.ungroupable.drg		
2 tma.rm.dq.fy08.dcop.percent.ahlta		
3 tma.rm.dq.fy08.dcop.rep.comp.actionrep		
4 Case Management Checking		
Exit		

Retrieve From submenu:
- Find Documents
- Users...
- Broadcast Agent...
- Corporate Documents...

Report Title

Cate	Bed Days, Raw	Dispositions, Ra	RWP, Raw
	205,303	55,279	54,386.9163
	299,572	117,996	61,205.3952
	3,218	1,058	371.8084
	8,772	3,168	2,013.8309
		28,261	30,589.9047
		7,672	8,819.2173
		6,293	7,054.0698
		261	148.9895
		180	196.2450
	164	80	59.1171
	51,106	9,764	14,686.1561
	126,346	33,763	44,124.7145
	1,385	184	514.7500

Select report of interest and click retrieve

File   Edit   View   Insert   Format   Tools   Data   Analysis   Window   Help

75%

Data | Map

Variables
- FM(MEPRS)
- FM(SIDR)
- FM(WWR)
- FY(MEPRS)
- FY(SIDR)
- FY(WWR)
- Tmt DMIS ID Military Se
- Tmt DMIS ID Military Se
- Tmt DMIS ID Military Se
- Tmt DMIS ID Name(ME
- Tmt DMIS ID Name(SID
- Tmt DMIS ID Name(WV
- Tmt DMIS ID Region(MI
- Tmt DMIS ID Region(SI
- Tmt DMIS ID Region(W
- Tmt DMIS ID(MEPRS)
- Tmt DMIS ID(SIDR)
- Tmt DMIS ID(WWR)
- % Complete
- % Complete--MEPRS to
- Dispositions
- Dispositions, Raw
- Work Amount
- Formulas
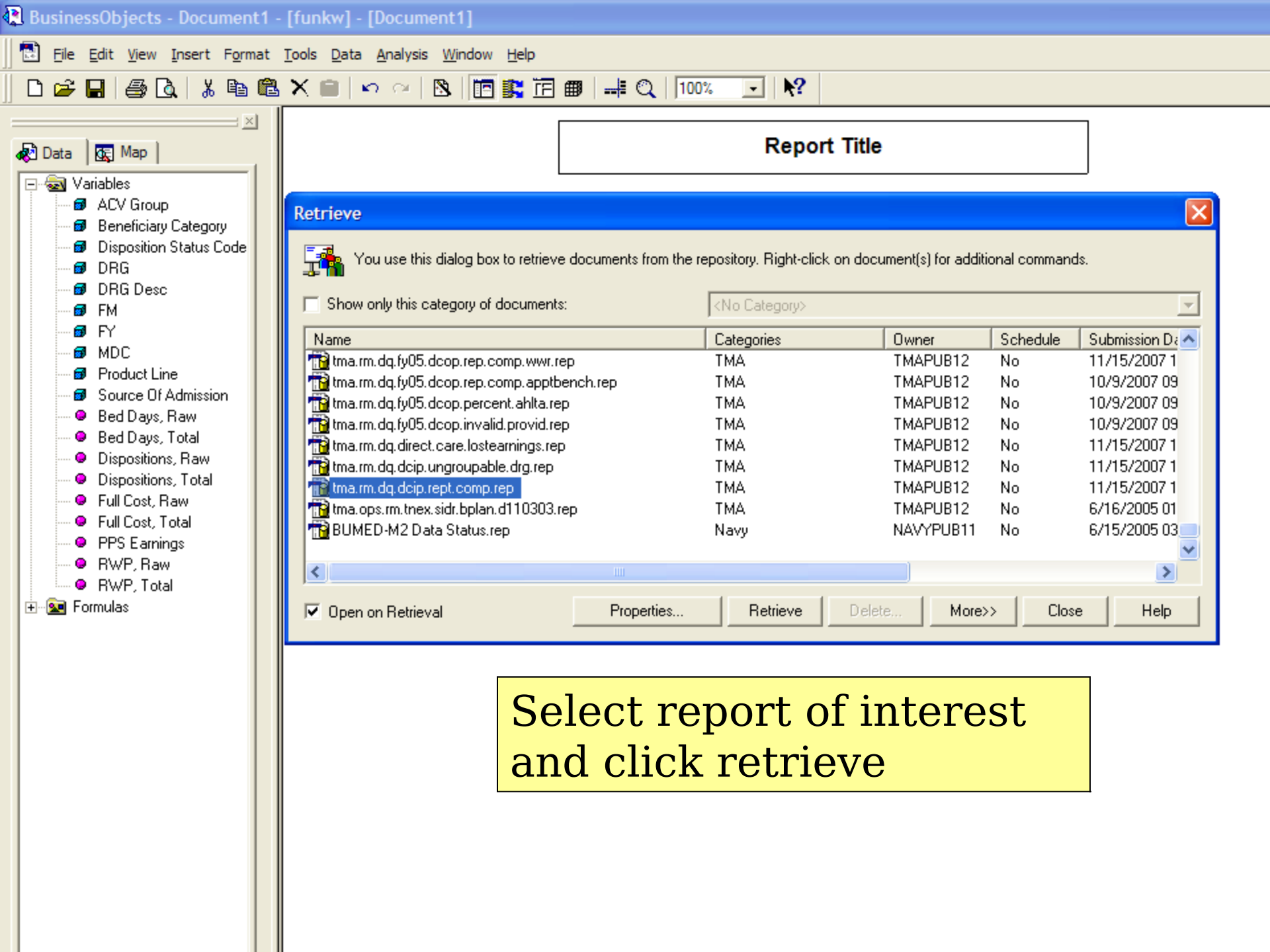
Inpatient Reporting Compliance

Date Last Updated:
1/17/2008

FY(SIDR)	FM(SIDR)	Tmt DMIS ID Military Service(SIDR)	SIDR Dispositions	WWR Dispositions	MEPRS Dispositions	% Complete--SIDR to WWR	% Complete--MEPRS to WWR
2005	1	A	11,453	11,454	11,473	99.99 %	100.17 %
2005	1	F	4,555	4,548	4,555	100.15 %	100.15 %
2005	1	N	7,834	7,854	7,826	99.75 %	99.64 %
2005	2	A	11,003	11,014	11,031	99.90 %	100.15 %
2005	2	F	4,082	4,061	4,016	100.52 %	98.89 %
2005	2	N	7,067	7,089	7,089	99.69 %	100.00 %
2005	3	A	11,239	11,260	11,261	99.81 %	100.01 %
2005	3	F	4,109	4,095	4,079	100.34 %	99.61 %
2005	3	N	7,296	7,324	7,312	99.62 %	99.84 %
2005	4	A	11,328	11,340	11,328	99.89 %	99.89 %
2005	4	F	4,318	4,320	4,304	99.95 %	99.63 %
2005	4	N	7,3				99.84 %
2005	5	A	10,7				99.51 %
2005	5	F	4,2				99.25 %
2005	5	N	6,7				99.15 %
2005	6	A	11,				98.88 %
2005	6	F	4,629	4,638	4,637	99.81 %	99.98 %
2005	6	N	7,532	7,536	7,534	99.95 %	99.97 %
2005	7	A	11,309	11,430	11,356	98.94 %	99.35 %
2005	7	F	4,403	4,410	4,344	99.84 %	98.50 %
2005	7	N	7,322	7,284	7,282	100.52 %	99.97 %
2005	8	A	11,104	11,228	11,146	98.90 %	99.27 %
2005	8	F	4,306	4,308	4,302	99.95 %	99.86 %
2005	8	N	7,212	7,208	7,208	100.06 %	100.00 %
2005	9	A	10,707	10,858	10,748	98.61 %	98.99 %
2005	9	F	4,008	4,013	4,030	99.88 %	100.42 %
2005	9	N	7,136	7,155	7,152	99.73 %	99.96 %
2005	10	A	10,826	10,969	10,812	98.70 %	98.57 %
2005	10	F	3,918	3,944	3,947	99.34 %	100.08 %
2005	10	N	7,368	7,354	7,341	100.19 %	99.82 %
2005	11	A	11,347	11,486	11,342	98.79 %	98.75 %
2005	11	F	4,092	4,121	4,089	99.30 %	99.22 %
2005	11	N	7,467	7,461	7,458	100.08 %	99.96 %
2005	12	A	11,377	11,533	11,363	98.65 %	98.53 %
2005	12	F	3,637	3,644	3,637	99.81 %	99.81 %

Service Level Tab

File   Edit   View   Insert   Format   Tools   Data   Analysis   Window   Help

75%

Date Last Updated:

Inpatient Reporting Compliance -- MTF Level

1/17/2008

Data | Map

Variables
- FM(MEPRS)
- FM(SIDR)
- FM(WWR)
- FY(MEPRS)
- FY(SIDR)
- FY(WWR)
- Tmt DMIS ID Military Se
- Tmt DMIS ID Military Se
- Tmt DMIS ID Military Se
- Tmt DMIS ID Name(ME
- Tmt DMIS ID Name(SID
- Tmt DMIS ID Name(WV
- Tmt DMIS ID Region(MI
- Tmt DMIS ID Region(SI
- Tmt DMIS ID Region(W
- Tmt DMIS ID(MEPRS)
- Tmt DMIS ID(SIDR)
- Tmt DMIS ID(WWR)
- % Complete
- % Complete--MEPRS to
- Dispositions
- Dispositions, Raw
- Work Amount

Formulas

Tmt DMIS ID(SIDR)	FM(SIDR)	Tmt DMIS ID Military Service(SIDR)	SIDR Dispositions	WWR Dispositions	MEPRS Dispositions	% Complete--SIDR to WWR	% Complete--MEPRS to WWR
0005	1	A	633	647	435	97.84 %	67.23 %
0005	2	A	467	631	439	74.01 %	69.57 %
0005	3	A	516	518	518	99.61 %	100.00 %
0005	4	A	419	419	418	100.00 %	99.76 %
0005	5	A	488	487	487	100.21 %	100.00 %
0005	6	A	518	518	513	100.00 %	99.03 %
0005	7	A	458	458	458	100.00 %	100.00 %
0005	8	A	406	406	406	100.00 %	100.00 %
0005	9	A	416	416	416	100.00 %	100.00 %
0005	10	A	442	442	443	100.00 %	100.23 %
0005	11	A	500	500	500	100.00 %	100.00 %
0005	12	A	58				62.33 %
0006	1	F	82				99.44 %
0006	2	F	78				100.00 %
0006	3	F	853	861	1,073	99.07 %	124.62 %
0006	4	F	812	820	1,120	99.02 %	136.59 %
0006	5	F	798	798	798	100.00 %	100.00 %
0006	6	F	939	943	943	99.58 %	100.00 %
0006	7	F	908	910	910	99.78 %	100.00 %
0006	8	F	898	900	900	99.78 %	100.00 %
0006	9	F	850	855	855	99.42 %	100.00 %
0006	10	F	745	748	748	99.60 %	100.00 %
0006	11	F	745	753	753	98.94 %	100.00 %
0006	12	F	767	768	768	99.87 %	100.00 %
0009	1	F	15	15	15	100.00 %	100.00 %
0009	2	F	12	12	12	100.00 %	100.00 %
0009	3	F	6	6	6	100.00 %	100.00 %
0009	4	F	6	6	6	100.00 %	100.00 %
0009	5	F	1	1	1	100.00 %	100.00 %
0009	6	F	1	1	1	100.00 %	100.00 %
0009	12	F	9				
0014	1	F	1,137	1,135	1,135	100.18 %	100.00 %
0014	2	F	1,064	1,062	1,063	100.19 %	100.09 %
0014	3	F	1,143	1,143	1,139	100.00 %	99.65 %
0014	4	F	1,099	1,099	1,484	100.00 %	135.03 %

MTF Level Tab

Worldwide -- SIDR % Complete Metric

Legend:
- A
- F
- N

Y-axis: 120.00%, 100.00%, 80.00%, 60.00%, 40.00%, 20.00%, 0.00%

X-axis: Oct-04, Dec-04, Feb-05, Apr-05, Jun-05, Aug-05, Oct-05, Dec-05, Feb-06, Apr-06, Jun-06, Aug-06, Oct-06, Dec-06, Feb-07, Apr-07, Jun-07, Aug-07, Oct-07
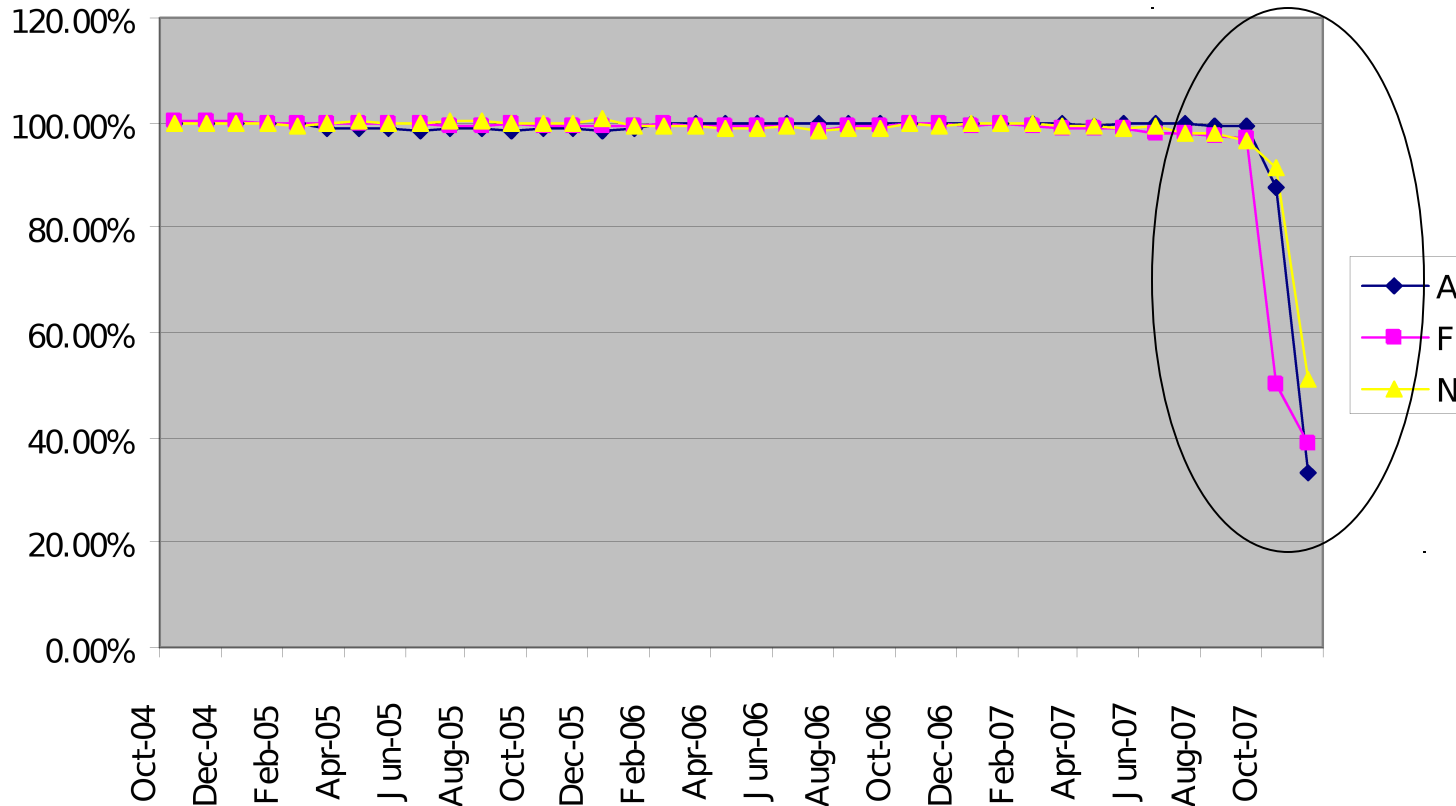
Used data from M2 report

Use Report to Identify Holes
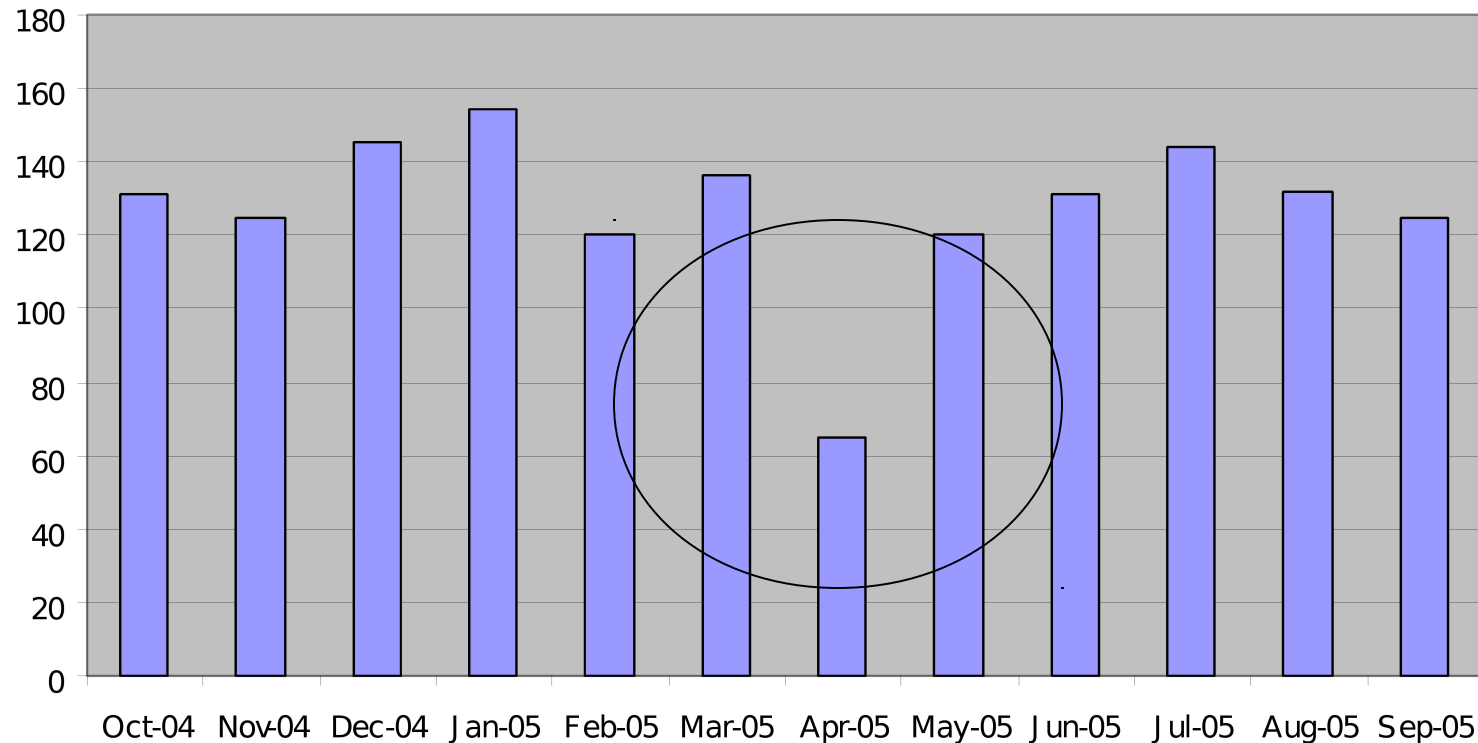
Clinical Coding

- Records in M2 are available at detailed level
  - One record per stay
  - Coding is really important!
  - Affects ability to identify types of cases; also affects RWP assignment
- M2 shares record identifiers with CHCS
  - Tmt DMISID + Patient Register Number (PRN)
  - PRN is called Record ID in M2
  - Include in queries (Tmt DMISID and Record ID) to retrieve individual SIDRs.
  - Include diagnosis and procedure codes, DRG, dates of care, etc.

Clinical Coding

- The "Diagnosis Related Group" (DRG) is a very important data element in inpatient data.
  - Not directly coded by an MTF; based on diagnosis and procedure codes, DRG, dates of care, and age of patient.
  - DRGs provide a convenient way to identify <u>types of care</u>
  - For most types of care there are 2 DRGs; one representing care w/o complications; the other with complications.
  - Associated with each DRG is a relative weight – representing how hard that DRG is compared with all other DRGs.
  - Complicated DRGs have higher relative weights that uncomplicated.

DRG Weight Examples

DRG	Description	Weight	Mean LOS	SST	LST
370	C SECTION W CC	0.8998	3.6	1	15
371	C SECTION W/O CC	0.7210	3.0	1	8
372	VAG DELIVERY W CC	0.5175	2.4	1	8
373	VAG DELIVERY W/O CC	0.4038	1.9	1	5

- Higher weight for surgical care! Incorporates charges for OR, recovery, etc.

- Higher weights for complicated care

Clinical Coding

- Relative weights are the basis of the "RWP" (relative weighted product).
  - Important to capture complications and co-morbidities.
  - "CC"s are identified by
    - Extra listed diagnoses and/or procedures
    - Extra digits identifying specific problems
- Pay attention to diagnosis and procedure coding
  - Most important way to get the right credit for inpatient care
- No systematic way to identify 'undercoding'
  - Look at rates of complicated vs. not at your MTF compared with peer MTFs.
  - No standard report for this

Ungroupable DRG Report & Examples

- One way to identify *miscoded* records is using ungroupable DRGs! (469 & 470)
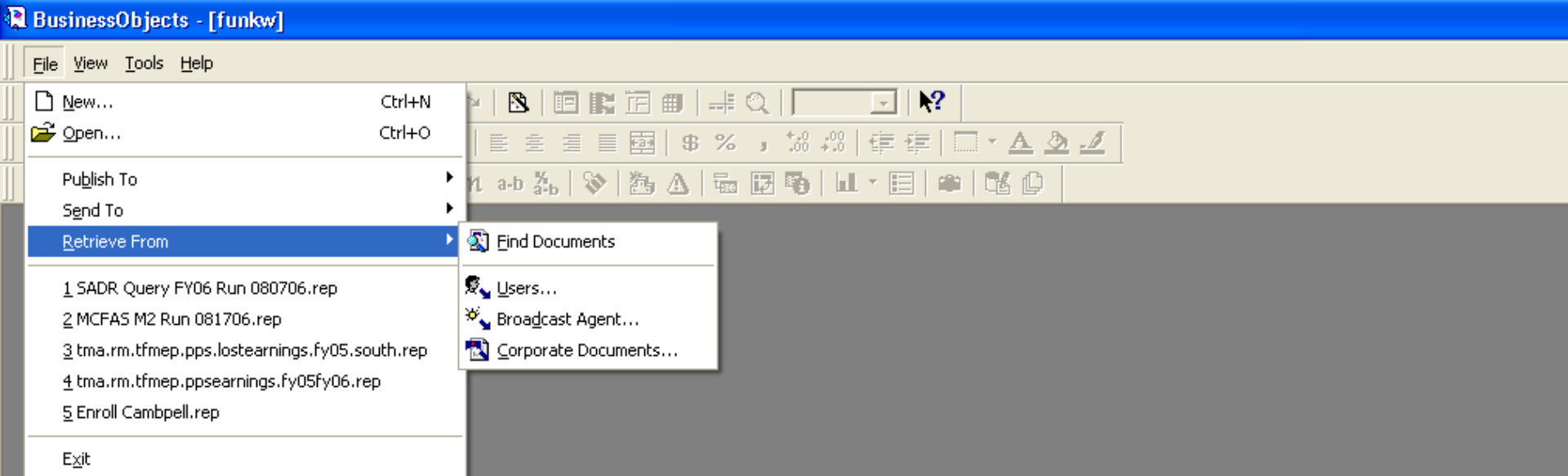- Ungroupable DRGs are significant because they are not counted for most purposes!
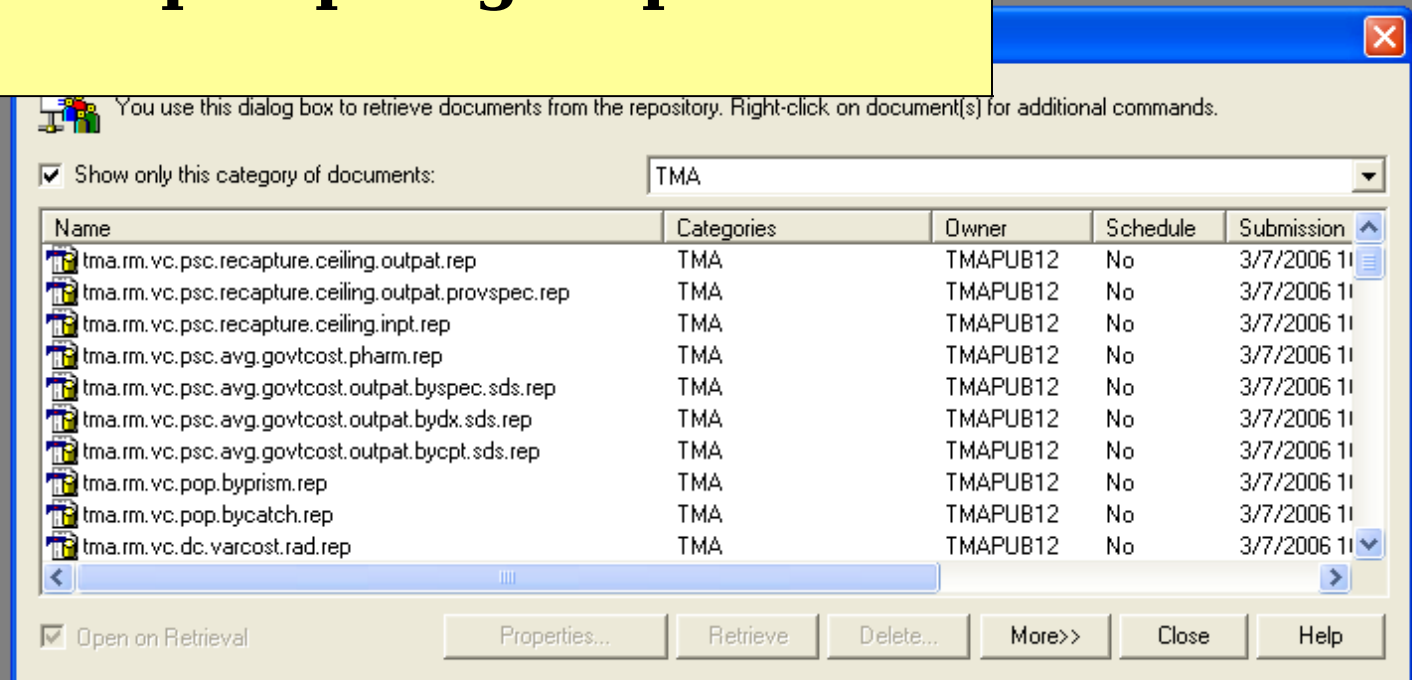
MTF & Attributes

Bed Days

FY & FM

Estimated Full Cost

Patient Register Number

BusinessObjects - [funkw]

File   View   Tools   Help

New...	Ctrl+N
Open...	Ctrl+O
Publish To	▶
Send To	▶
Retrieve From	▶

Retrieve From submenu:
- Find Documents
- Users...
- Broadcast Agent...
- Corporate Documents...

1 SADR Query FY06 Run 080706.rep
2 MCFAS M2 Run 081706.rep
3 tma.rm.tfmep.pps.lostearnings.fy05.south.rep
4 tma.rm.tfmep.ppsearnings.fy05fy06.rep
5 Enroll Cambpell.rep

Exit

After logging into M2

Users go to the path

    File

    Retrieve from

    Corporate Documents

Select:

tma.rm.dq.dcip.ungroupable.drg

You use this dialog box to retrieve documents from the repository. Right-click on document(s) for additional commands.

☑ Show only this category of documents: | TMA ▼

Name	Categories	Owner	Schedule	Submission
tma.rm.vc.psc.recapture.ceiling.outpat.rep	TMA	TMAPUB12	No	3/7/2006 1
tma.rm.vc.psc.recapture.ceiling.outpat.provspec.rep	TMA	TMAPUB12	No	3/7/2006 1
tma.rm.vc.psc.recapture.ceiling.inpt.rep	TMA	TMAPUB12	No	3/7/2006 1
tma.rm.vc.psc.avg.govtcost.pharm.rep	TMA	TMAPUB12	No	3/7/2006 1
tma.rm.vc.psc.avg.govtcost.outpat.byspec.sds.rep	TMA	TMAPUB12	No	3/7/2006 1
tma.rm.vc.psc.avg.govtcost.outpat.bydx.sds.rep	TMA	TMAPUB12	No	3/7/2006 1
tma.rm.vc.psc.avg.govtcost.outpat.bycpt.sds.rep	TMA	TMAPUB12	No	3/7/2006 1
tma.rm.vc.pop.byprism.rep	TMA	TMAPUB12	No	3/7/2006 1
tma.rm.vc.pop.bycatch.rep	TMA	TMAPUB12	No	3/7/2006 1
tma.rm.vc.dc.varcost.rad.rep	TMA	TMAPUB12	No	3/7/2006 1

☑ Open on Retrieval

Properties... | Retrieve | Delete... | More>> | Close | Help

File Edit View Insert Format Tools Data Analysis Window Help

90%

Data | Map

- Variables
  - FM
  - FY
  - Record ID
  - Tmt DMIS ID
  - Tmt DMIS ID Military Se
  - Tmt DMIS ID Name
  - Bed Days, Total
  - Full Cost, Total
- Formulas

FY05 Direct Care Costs and Bed Days for Ungroupable DRGs

Includes all MTFs. Data have already been run

FY	FM	Record ID	Tmt DMIS ID	Tmt DMIS ID Name	Tmt DMIS ID Military Service	B		
2005	1	0149352	0621	NH OKINAWA	N			
2005	1	0215338	0024	NH CAMP PENDL	N			
2005	1	0597135	0607	LANDSTUHL REGI	A		3.00	$21,013.30
2005	1	0600973	0032	EVANS ACH-FT. C	A		6.07	$7,277.94
2005	2	0078272	0622	NH YOKOSUKA	N		4.05	$8,417.66
2005	2	0078279	0622	NH YOKOSUKA	N		1.01	$2,365.79
2005	2	0658443	0029	NMC SAN DIEGO	N		2.00	$694.32
2005	2	0658503	0029	NMC SAN DIEGO	N		2.00	$694.32
2005	2	0981462	0061	IRELAND ACH-FT.	A		1.01	$2,581.25
2005	2	6329783	0126	NH BREMERTON	N		2.00	$4,678.93
2005	3	0981544	0061	IRELAND ACH-FT.	A		2.00	$4,714.79
2005	4	0078470	0622	NH YOKOSUKA	N		1.00	$7,272.22
2005	4	0078511	0622	NH YOKOSUKA	N		7.00	$13,200.67
2005	4	0159014	0092	NH CHERRY POIN	N		6.00	$5,069.66
2005	4	0216702	0024	NH CAMP PENDLI	N		2.00	$3,064.65
2005	4	0662751	0029	NMC SAN DIEGO	N		2.00	$694.32
2005	5	0662308	0029	NMC SAN DIEGO	N		13.00	$24,923.38
2005	5	0663561	0029	NMC SAN DIEGO	N		1.00	$1,448.21
2005	7	0351515	0064	BAYNE-JONES AC	A		2.00	$3,717.31
2005	7	0409939	0042	96TH MED GRP-E	F		1.00	$1,264.42
2005	8	0218194	0024	NH CAMP PENDLI	N		1.00	$1,658.02
2005	8	0218232	0024	NH CAMP PENDLI	N		5.00	$7,222.05
2005	8	0488897	0052	TRIPLER AMC-FT	A		56.00	$115,846.56
2005	9	0137784	0038	NH PENSACOLA	N		2.00	$8,790.95
2005	9	0218772	0024	NH CAMP PENDLI	N		5.25	$7,583.64
2005	10	0204770	0091	NH CAMP LEJEUN	N		6.00	$6,086.35
2005	10	0218893	0024	NH CAMP PENDLI	N		2.02	$3,101.81
2005	10	0604946	0032	EVANS ACH-FT. C	A		4.00	$4,937.89
2005	10	0647233	0073	81ST MED GRP-K	F		2.05	$663.68
2005	10	5014926	0030	NH TWENTYNINE	N		1.00	$3,820.82
2005	10	5014963	0030	NH TWENTYNINE	N		2.00	$7,268.90

Fixing SIDRs

- <u>The reasons a DRG is "ungroupable" are not always clear. Some things to look at:</u>
  - Diagnosis and procedure codes may be unrelated
  - Information needed by the grouper may be missing or miscoded
  - Age and dates of service may be inconsistent.

  - Check the medical record for coding accuracy.
  - Check the date of birth, admission and discharge dates
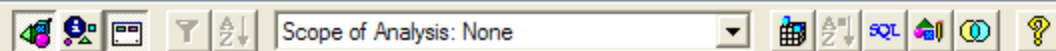
Query Panel - MHS MART (M2) Universe

Scope of Analysis: None

Classes and Objects

- Eligibility (DEERS/MCFAS)
- TRICARE Relationships (DEERS)
- Health Care Services
- System Production (MEPRS/WWR)
- M2 Data Status
- Reference Tables

Result Objects

- Bed Days, ...
- Full Cost, Raw
- DRG
- Diagnosis 1
- Diagnosis 4
- Diagnosis 5
- Diagnosis 6
- Diagnosis 7
- Procedure 2
- Procedure 3
- Procedure 4
- Procedure 5
- Procedure 8
- Record ID
- Tmt DMIS ID
- Person ID
- Service Date

Conditions

And
- Tmt DMIS ID Equal to '0124'
- Record ID Equal to '4196260'

Using M2 to pull down details associated with problem records

Limit to Tx DMISID and Record ID with ungroupable DRGs

Include data elements of interest from SIDR

Standard Inpatient Data Record

Length of Stay Errors
- Query your MTF
- Admission and Disposition Date
- DRG
- Not a standard report, but not hard

If you limit to long lengths of stay, you can easily find errors (and the errors you find will be the ones with high impact!)

Bad Dates of Care

Record ID	DRG	Admission Date	Service Date	Average LOS	Full Cost, Total
0669197	372	03/19/2004	03/21/2005	367.00	$506,734.36

Probably mistyped either the admission or the disposition date.

This is a delivery with a length of stay greater than one year.

Record ID is the PRN

Standard Inpatient Data Record

- LOS errors affect RWP assignment, usually.
- RWP is the DRG Relative Weight
  - Unless patient stays "too long" or "too short"
  - Outliers defined as <u>length of stay outside two standard deviations from the mean.</u>
- For outlier cases, RWP is adjusted based on how different actual LOS is from mean.
- In this case:
  - RWP should likely have been: **0.55**
  - RWP was: **98.38**

Appointment Data

Appointment Data Record

- What does an appointment record represent?

- How is the information collected?

- Timing?

- MDR? M2?

- How is it used?

Appointment Data Record

- <u>Each record represents a kept appointment at an MTF</u>
    - (Some records exist for line hospitals and others that use CHCS)
    - Created from CHCS appointment file
    - Information is primarily collected as clerks appoint patients and close out appointments.
    - There are 30 million + appointments per year
    - End of Day Processing is key to data. Records will not be sent by CHCS if not complete.
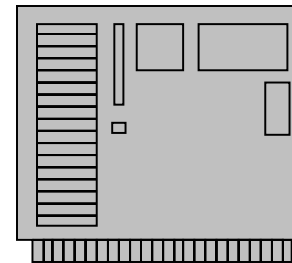   - File is sent automatically by CHCS on the 5th of each month
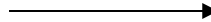
Record in Appt File
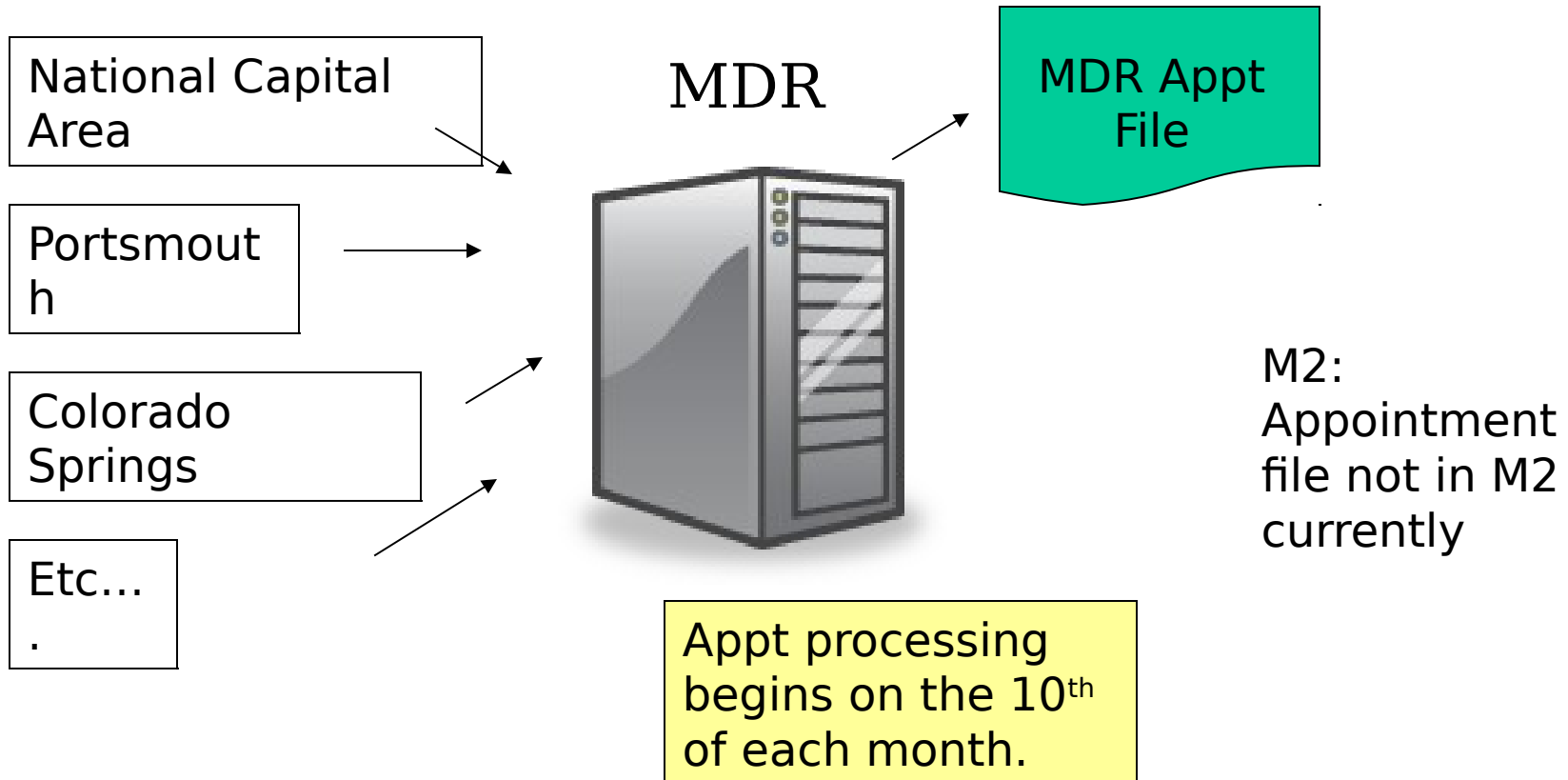
How about 2?

EOD Processing

We need a doc!

- Patient calls to make an appointment.
- Appointment clerk books appointment
- Information is saved in appt file.
- After appointment date passes, clerk does "EOD" Processing to indicate status
- Appointment records sent to MDR

Appointment Data Record

- Information on the Appointment Record
  - Patient Identifier and Demographics
  - Sponsor Information
  - Appointment Type, Duration, Provider
  - Clinic
  - Enrollment Information from DEERS check
  - Appointment Status Code
  - Date/Time Appointment Made
  - Associated Referral Number

Preparation of Appointment Files in MDR & M2

National Capital Area

Portsmouth

Colorado Springs

Etc....

MDR

MDR Appt File

M2: Appointment file not in M2 currently

Appt processing begins on the 10th of each month.

Appointment Data Record

- MDR Processing of Appointment Data
  - Person identification standardization
  - Application of DEERS attributes (including application of retroactive changes)
  - Additional field derivations
  - Application of update records
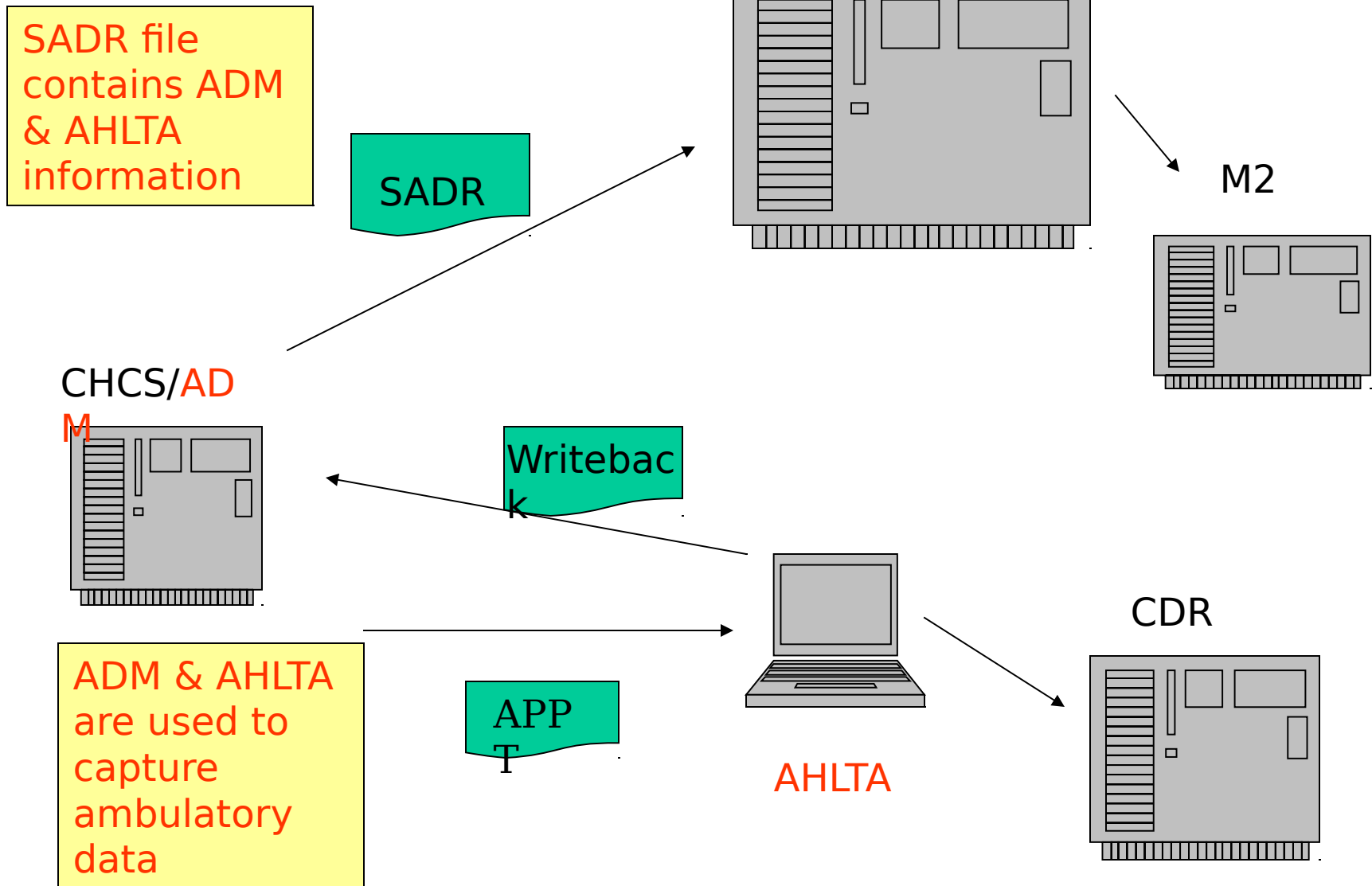- MDR Appointment File is used in preparing a major source of data for M2 (SADR: Described later)

Standard Ambulatory Data Record

Professional Data Capture

- Appointment records are automatically sent from CHCS Appt File to ADM & AHLTA prior to the appointment date.
  - Providers can <u>capture</u> the professional record in either AHLTA or ADM
  - If AHLTA is used; information is "written back" to CHCS/ADM
  - CHCS assembles AHLTA & ADM SADRs and sends off to MDR
  - AHLTA sends information directly to CDR

FLOW OF SADR

MDR

SADR file contains ADM & AHLTA information

SADR

M2

CHCS/ADM

Writeback

ADM & AHLTA are used to capture ambulatory data

APPT

AHLTA

CDR

Standard Ambulatory Data Record

- SADR: Record of information captured during an encounter or rounds visit.
- Not really an ambulatory record!
  - Ambulatory Care (Office, ER, Same Day Surgery)
  - Inpatient Rounds
  - Telephone Consults

  - MHS does not generally capture inpatient procedure provider records, *unlike private sector*
  - (Hospital record is captured, but not a separate provider piece; causes problems with studying productivity and billing)

Standard Ambulatory Data Record

- Information on the SADR
  - Patient Identifier and Demographics
  - Sponsor Information
  - Diagnosis and HCPCS Procedure Codes, Clinic
  - Encounter Date
  - Type of Appt
  - Enrollment Information from DEERS check at time of admission
  - Administrative data, etc…
  - Provider IDs and Specialty Codes
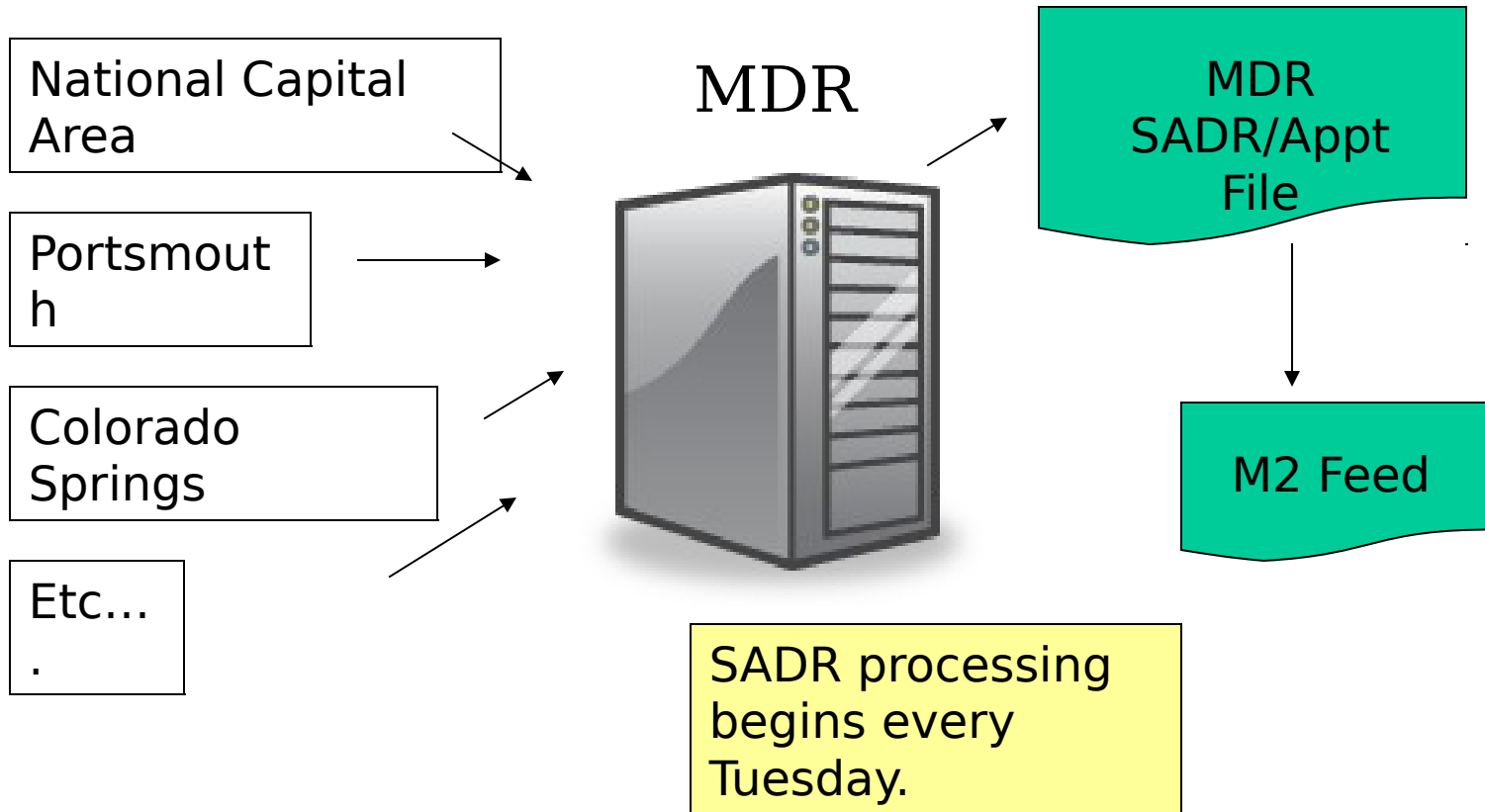
Standard Ambulatory Data Record

- Most information in a SADR comes from elsewhere in CHCS
  - Patient Identifier and Demographics
  - Sponsor Information
  - Clinic
  - Encounter Date
  - Type of Appt & Other Admin Data
  - Enrollment Information from DEERS check at time of admission
  - Provider ID & Specialty Code
- "SADR Capture" includes coding diagnoses and procedures, additional providers and other administrative data

Standard Ambulatory Data Record

- Important Pieces of Information that are coded locally but **not on the SADR**
  - <u>Units of Service and Modifiers</u> associated with each procedure code
  - Some procedure, E&M and diagnosis codes

  - Change request underway to incorporate into several years of data retroactively.

Preparation of SADR Files in MDR & M2

National Capital Area

Portsmouth

Colorado Springs

Etc...

MDR

MDR SADR/Appt File

M2 Feed

SADR processing begins every Tuesday.

Standard Ambulatory Data Record
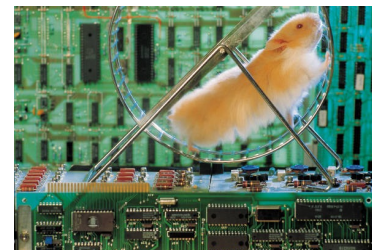
- MDR Processing of SADR
  - Due to lack of completeness of SADRs, appointment records are used to enhance the SADR data file.
  - For each kept appointment, if a SADR exists, it is used.
  - If a SADR is not collected, then the appointment record is used to create an "inferred SADR".
  - When/if a SADR finally shows up, the inferred SADR is removed and the real SADR kept.

Matching SADRs to Appointment Records

- When 'processing' in MDR: Compare appt and SADR; record by record.
- Missing a SADR for Appt # 4.
- #4 will be in the MDR database as an 'inferred SADR'.

SADR #	APPT #
1	1
2	2
3	3
	4
5	5
6	6
7	7

			Final MDR Data Set		
#	Compliance Status	Prov	Patient	Clinic	E&M
1	R	JONR	MARY	BAA	99214
2	R	JONR	JOE	BAA	99213
3	R	JONR	JANE	BAA	99213
4	I	JONR	NAN	BAA	N/A
5	R	JONR	AL		
6	R	JONR	ROB		
7	R	JONR	SARA		

Appt # 4 has no E&M because no SADR has been collected. This is an appointment-based record

Standard Ambulatory Data Record

- MDR Processing of SADR

    - Match to appointment records, include SADRs and kept appointments w/o a SADR
    - Application of DEERS attributes (including application of retroactive changes) & GWOT data
    - Weighting and Costing; including estimation on "inferred" records.
    - Person identification standardization
    - Additional field derivations
    - Application of update records
    - Preparation of data for M2
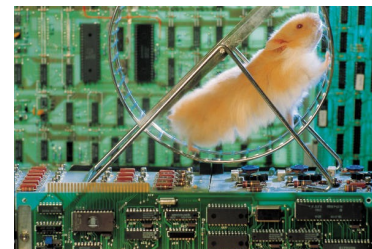
Standard Ambulatory Data Record

Uses of SADR

- – SADRs can be tabulated to generate important management information
- – SADRs can also be used at person level; to improve health care, identify potential case management candidates, etc.

Example of Tabulated SADRS:

MEPRS Codes with the most SADRs in FY07

Code	Decription	Reported Encounters
BGA	Family Practice	6,483,669
BHA	Primary Care	5,139,206
BDA	Pediatrics	2,146,285
BLA	Physical Therapy	1,979,742
BCB/BCC	Obstetrics & Gynecology*	1,651,597
BAA	Internal Medicine	1,468,806
BIA	Emergency Room	1,435,124
BHC	Optometry	1,180,619
BEA	Orthopedics	783,909
BJA	Flight Medicine	780,144

* OB/GYN combined because Navy does not report them separately

Example of Tabulated SADRS:

Reported Encounters at MTFs in FY07, by enrollment program

Enrollment Program	Encounters
Prime	23,934,766
Reliant	3,656,503
Other	1,803,338
Plus	1,645,962
Overseas Remote	15,750
Designated Provider	3,144
Total	31,059,463
% Prime	77%

Example of Tabulated SADRS:

Trends in Reported SADRs by 1st Digit of MEPRS Code

Code	Description	2004	2005	2006	2007	2008
A	Inpatient	252,101	473,645	636,647	746,427	159,803
B	Ambulatory	30,635,314	30,429,537	30,340,669	31,059,463	7,799,925
C	Dental	15,611	13,883	15,874	13,790	3,159
D	Ancillary	135,187	144,130	106,381	104,758	22,391
E	Support	970	1,839	4,255	12,742	11,224
F	Special Programs	1,866,593	2,000,369	2,217,698	2,335,565	725,786
	Others				177	166
	Total	32,905,776	33,063,403	33,321,524	34,272,922	8,722,454

Example of Person Level Use of SADRS:

Emergency Room Recurrences -- One young retiree visiting the ER nearly 30 times this FY already for the same diagnosis

Date	Diagnosis
10/2/2007	Headache
10/4/2007	Headache
10/6/2007	Migraine
10/9/2007	Headache
10/11/2007	Headache
10/23/2007	Headache
10/26/2007	Headache
11/1/2007	Migraine
11/2/2007	Headache
11/5/2007	Headache
11/7/2007	Headache
11/8/2007	Headache
11/14/2007	Headache
11/16/2007	Headache
11/17/2007	Migraine

Date	Diagnosis
11/19/2007	Migraine
11/23/2007	Headache
11/24/2007	Headache
11/25/2007	Headache
11/28/2007	Headache
11/30/2007	Headache
12/12/2007	Headache
12/14/2007	Headache
12/15/2007	Headache
12/17/2007	Headache
12/18/2007	Headache
12/21/2007	Headache
12/22/2007	Headache
12/24/2007	Headache

Example of Person Level Use of SIDRS:

Multiple admissions for the same DRG.. Potential for case or disease management. AD Dependent; Age 5

Person ID	Admission Date	Discharge Date	BenCat	Age	DRG	DRG Desc	
125060XXXX	12/26/2002	12/				BRONCHITIS & ASTHMA AGE 0-17	
125060XXXX	11/13/2006	11/	DA	5	098	BRONCHITIS & ASTHMA AGE 0-17	
125060XXXX	1/14/2007	1/15/2007	DA	5	098	BRONCHITIS & ASTHMA AGE 0-17	
125060XXXX	2/5/2007	2/6/2007	DA	5	098	BRONCHITIS & ASTHMA AGE 0-17	
125060XXXX	5/2/2007	5/4/2007	DA	5	098	BRONCHITIS & ASTHMA AGE 0-17	

Previous Example from SIDR

Example of Person Level Use of SADRS:

Office and ER visits for the 5 year old admitted multiple times for the same diagnosis.

Service Date	MEPRS3 Code	Diagnosis 1
11/6/2006	BIA – ER	462 – Pharyngitis
11/13/2006*	BIA – ER	486 – Pneumonia
11/16/2006	BDA – Peds	49390 – Asthma
1/14/2007*	BIA – ER	49392 – Asthma
1/19/2007	BDA – Peds	49390 – Asthma
1/30/2007	BDA – Peds	49390 – Ashtma
2/4/2007*	BIA – ER	49392 – Asthma
2/9/2007	BDA – Peds	49390 – Asthma
3/14/2007	BDA – Peds	49300 – Extrinsic Asthma
5/2/2007*	BIA – ER	49392 – Asthma
5/5/2007	BDA – Peds	49390 – Asthma
6/7/2007	BDA – Peds	49300 - Asthma

* Resulted in an admission

Important Data

| Key Data Elements	Why
Patient ID	DEERS App, Disease & Case Mgmt, MERHCF, GWOT, PPS, Balanced Score Card, Billing
Patient Category Code	Assignment of Beneficiary Category, Billing
Diagnosis Codes & Procedure Codes	APG/APC assignment, RVUs, identification of records for certain conditions or procedures, billing
Provider ID & Specialty	RVU assignment, provider productivity, practice patterns, etc…
Work Centers	Application of Costs, MERHCF, GWOT

Standard Ambulatory Data Record

Data Issues

- Completeness or Timeliness: completed records w/in 3 days for non APV, 15 for APV
  - IMC Checklist Item
  - Significant issue with SADR
  - Very large numbers of historical SADRs are missing
  - Compliance has improved but is still an issue
  - New appointment records offer excellent opportunities for managing compliance!

Standard Ambulatory Data Record
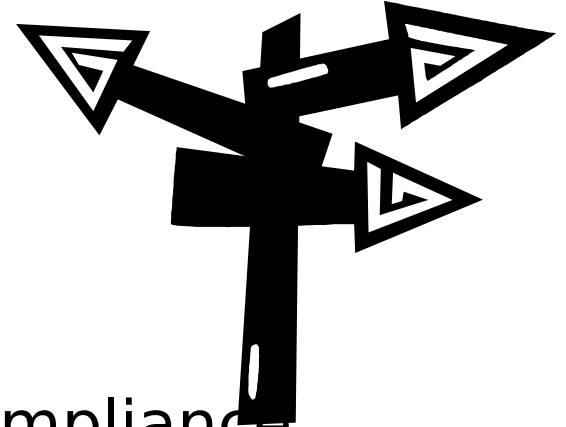
- Compliance
  - IMC Checklist Item
  - Two methods for monitoring compliance
  - Two Corporate Reports available for measuring compliance
  - SADR:WWR Comparison
  - SADR:Appointment Comparison

Compliance and Timeliness Report

tma.rm.dq.fy.dcop.rep.comp.wwr**:

- Updated once per month
- Within a few days of M2 WWR update
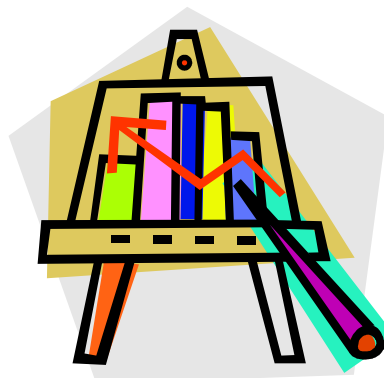- Can be updated by users also

MTF & Attributes

WWR Count Visits

FY & FM

Ratio of SADR: WWR

SADR Encounters

Standard Ambulatory Data Record

- Compliance
  - Imprecise match
  - WWR visits are a subset of SADR encounters
  - WWR includes only those visits that the local MTF determines "count"
  - SADR includes all encounters
  - Metric should be "greater than 100%"

All Encounters:

N= 31 Million

"Count Only

N= 29 Million

2 Million

Non-Count Ambulatory

Retrieve corporate document

File / Retrieve From / Corp Documents

File Edit View Insert Format Tools Data Analysis Window Help

100%

Report Title

Record ID	Admission Date	Service Date	Date Of Birth	Bed Days, Raw	Full Cost, Raw
4196260	01/21/2006	02/06/2006	02/20/2006	16	$40,226.20

Data   Map

- Variables
  - Admission Date
  - Date Of Birth
  - Diagnosis 1
  - Diagnosis 2
  - Diagnosis 3
  - Diagnosis 4
  - Diagnosis 5
  - Diagnosis 6
  - Diagnosis 7
  - Diagnosis 8
  - DRG
  - Person ID
  - Procedure 1
  - Procedure 2
  - Procedure 3
  - Procedure 4
  - Procedure 5
  - Procedure 6
  - Procedure 7
  - Procedure 8
  - Record ID
  - Service Date
  - Tmt DMIS ID
  - Bed Days, Raw
  - Full Cost, Raw
- Formulas

Retrieve

You use this dialog box to retrieve documents from the repository. Right-click on document(s) for additional commands.

☐ Show only this category of documents: <No Category>

Name		Schedule	Submission
tma.rm.dq.fy08.dcop.re...		No	11/15/2007
tma.rm.dq.fy08.dcop.re...		No	11/15/2007
tma.rm.dq.fy08.dcop.pe...		No	11/15/2007
tma.rm.dq.fy08.dcop.invalid.provid.rep	TMA	No	11/15/2007
tma.rm.dq.fy07.pdtsrx.directcare.xcost.rep	TMA	TMAPUB12	No	10/9/2007
tma.rm.dq.fy07.dcop.unspecified.provspec.rep	TMA	TMAPUB12	No	10/9/2007
tma.rm.dq.fy07.dcop.ungroupable.apg.rep	TMA	TMAPUB12	No	10/9/2007
tma.rm.dq.fy07.dcop.rep.comp.wwr.rep	TMA	TMAPUB12	No	11/15/2007
tma.rm.dq.fy07.dcop.rep.comp.apptbench.rep	TMA	TMAPUB12	No	10/9/2007
tma.rm.dq.fy07.dcop.percent.ahlta.rep	TMA	TMAPUB12	No	11/15/2007

Select DC Outpatient Completeness Report

☑ Open on Retrieval   Properties...   Retrieve   Delete...   More>>   Close   Help

File Edit View Insert Format Tools Data Analysis Window Help

80%

Data | Map

- Variables
  - Countable Visit
  - FM(MEPRS)
  - FM(SADR)
  - FM(WWR)
  - FY(MEPRS)
  - FY(SADR)
  - FY(WWR)
  - MEPRS3 Code(MEPRS)
  - MEPRS3 Code(SADR)
  - MEPRS3 Code(WWR)
  - Tmt DMIS ID Military Se
  - Tmt DMIS ID Military Se
  - Tmt DMIS ID Military Se
  - Tmt DMIS ID Name(ME
  - Tmt DMIS ID Name(SAI
  - Tmt DMIS ID Name(WV
  - Tmt DMIS ID(MEPRS)
  - Tmt DMIS ID(SADR)
  - Tmt DMIS ID(WWR)
  - % Complete--MEPRS/W
  - % Complete--SADR/WV
  - Encounters
  - Total Visits
  - Work Amount
- Formulas

FY07 Ambulatory Compliance Reporting, WWR Benchmark--Total Visits
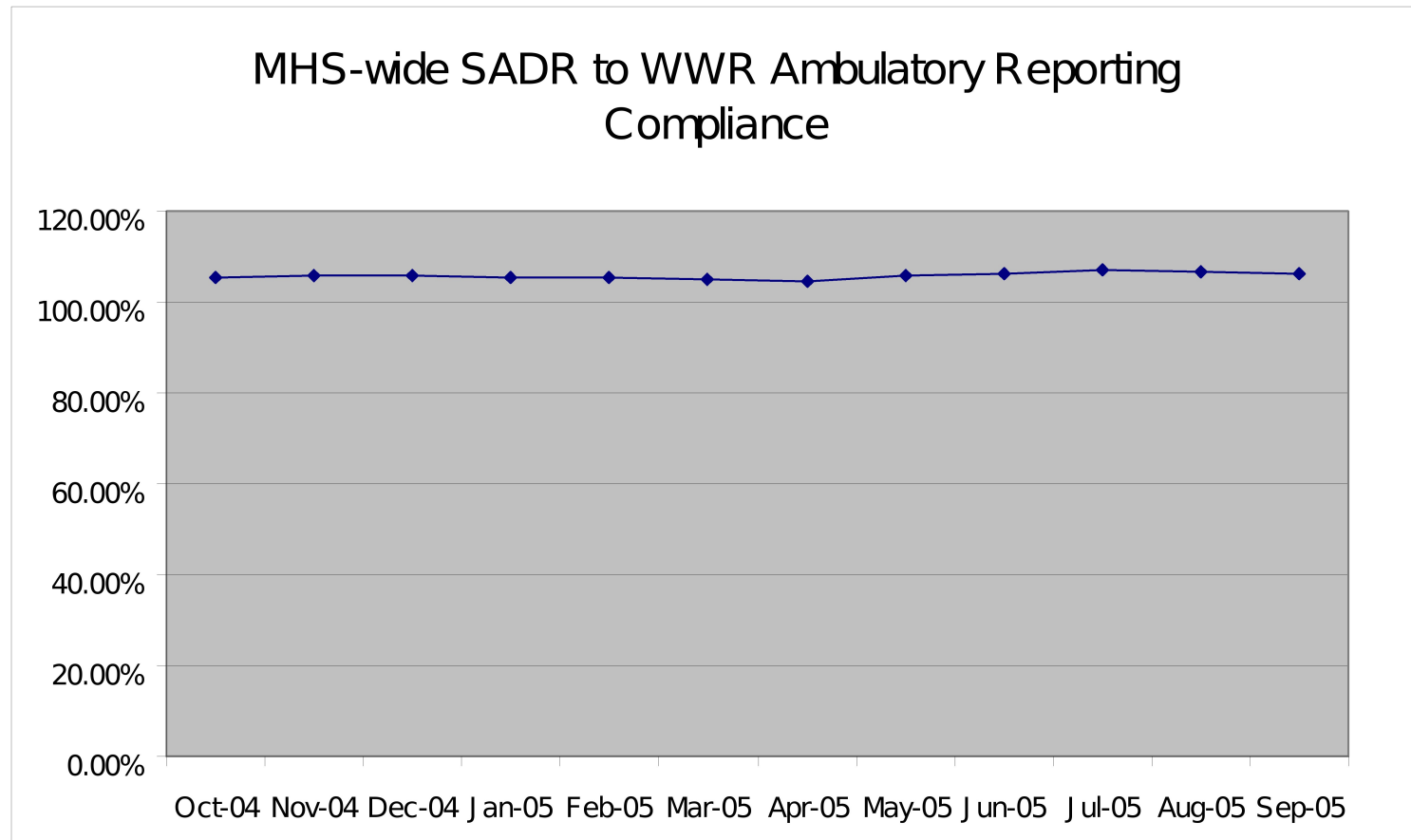
Date Last Updated:

11/14/2007

TMT DMIS ID	TMT DMIS ID Nam	Tmt DMIS ID Milita	FY(SADR)	FM(SADR)	SADR Enco	WWR Visits	MEPRS Visi	% Complete--SADR/WWR	% Complete--MEP
0001	FOX AHC-REDSTC	A	2007	1	7,455	7,033	7,033	106.00 %	100
0001	FOX AHC-REDSTC	A	2007	2	7,862	7,629	7,629	103.05 %	100
0001	FOX AHC-REDSTC	A	2007	3	7,250	7,103	7,103	102.07 %	100
0001	FOX AHC-REDSTC	A						102.70 %	100
0001	FOX AHC-REDSTC	A						102.78 %	100
0001	FOX AHC-REDSTC	A						104.87 %	100
0001	FOX AHC-REDSTC	A						102.80 %	100
0001	FOX AHC-REDSTC	A						104.83 %	100
0001	FOX AHC-REDSTC	A						107.23 %	100
0001	FOX AHC-REDSTC	A						108.00 %	99
0001	FOX AHC-REDSTC	A						106.87 %	100
0001	FOX AHC-REDSTC	A						104.56 %	100
0003	LYSTER AHC-FT.	A	2007	1	9,301	8,317	8,317	111.83 %	100
0003	LYSTER AHC-FT.	A	2007	2	9,096	8,356	8,356	108.86 %	100
0003	LYSTER AHC-FT.	A	2007	3	8,250	7,500	7,500	110.00 %	100
0003	LYSTER AHC-FT.	A	2007	4	10,411	9,538	9,538	109.15 %	100
0003	LYSTER AHC-FT.	A	2007	5	9,566	8,600	8,600	111.23 %	100
0003	LYSTER AHC-FT.	A	2007	6	11,132	10,150	10,150	109.67 %	100
0003	LYSTER AHC-FT.	A	2007	7	10,274	9,330	9,330	110.12 %	100
0003	LYSTER AHC-FT.	A	2007	8	10,368	9,514	9,514	108.98 %	100
0003	LYSTER AHC-FT.	A	2007	9	9,637	8,605	8,605	111.99 %	100
0003	LYSTER AHC-FT.	A	2007	10	9,132	8,102	8,102	112.71 %	100
0003	LYSTER AHC-FT.	A	2007	11	11,044	9,950	9,950	110.99 %	100
0003	LYSTER AHC-FT.	A	2007	12	8,737	7,742		112.85 %	
0004	42ND MEDICAL G	F	2007	1	9,430	9,101	9,087	103.61 %	99
0004	42ND MEDICAL G	F	2007	2	8,803	8,470	8,473	103.93 %	100
0004	42ND MEDICAL G	F	2007	3	7,115	7,710	7,702	92.28 %	99
0004	42ND MEDICAL G	F	2007	4	8,957	9,997	9,978	89.60 %	99
0004	42ND MEDICAL G	F	2007	5	7,931	8,359	8,251	94.88 %	98
0004	42ND MEDICAL G	F	2007	6	8,712	8,397	8,569	103.75 %	102
0004	42ND MEDICAL G	F	2007	7	9,288	8,879	8,812	104.61 %	99
0004	42ND MEDICAL G	F	2007	8	9,936	9,282	9,348	107.05 %	99
0004	42ND MEDICAL G	F	2007	9	9,622	8,465	8,448	113.67 %	99

Greater than 100%

So what?

Greater than 100% complete --- Is this good or bad?

MHS-wide SADR to WWR Ambulatory Reporting Compliance

120.00%	
100.00%	
80.00%	
60.00%	
40.00%	
20.00%	
0.00%	

Oct-04 Nov-04 Dec-04 Jan-05 Feb-05 Mar-05 Apr-05 May-05 Jun-05 Jul-05 Aug-05 Sep-05

Built from corporate report in M2

Compliance and Timeliness Report

More Direct Comparison

<u>tma.rm.dq.fy**.dcop.rep.comp.appt</u>:

- Updated once per month
- Within a few days of M2 Appointment update
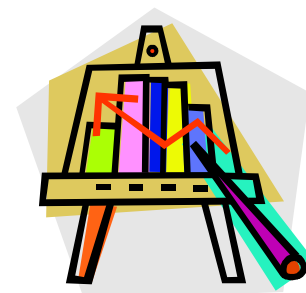- Can be updated by users also

MTF & Attributes

FY & FM

Captured SADRs

Inferred SADRs

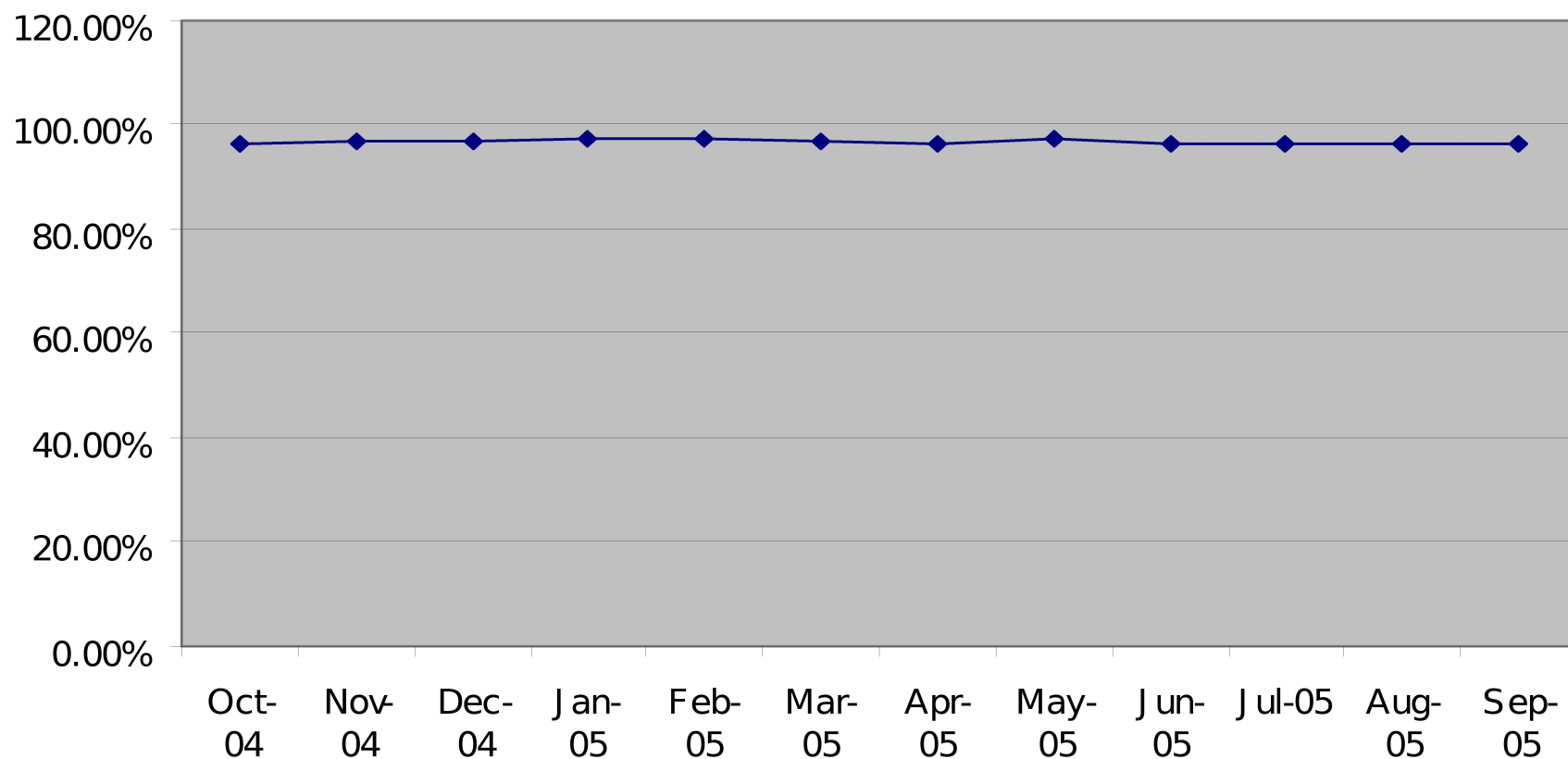% of SADRs captured

Standard Ambulatory Data Record

- Compliance
  - Based on record level match
  - Report is limited to ambulatory records, t-cons and hearing conservation clinic.
  - More precise methodology
  - "Action report" for drill to appointment ID, provider or clinic level
  - Be cautious with very recent data; check data status table in M2 for timing info

File Edit View Insert Format Tools Data Analysis Window Help

FY05 Ambulatory Reporting Compliance, Appointment Benchmark

Variables
- Compliance Status(Actu
- Compliance Status(Infer
- FM(Actual SADRs)
- FM(Inferred)
- FY(Actual SADRs)
- FY(Inferred)
- MEPRS3 Code(Actual S
- MEPRS3 Code(Inferred)
- Tmt DMIS ID Military Se
- Tmt DMIS ID Military Se
- Tmt DMIS ID Name(Act
- Tmt DMIS ID Name(Infe
- Tmt DMIS ID(Actual SA
- Tmt DMIS ID(Inferred)
- Encounters(Actual SAD
- Encounters(Inferred)
- Percent Complete
- Total Encounters

Formulas

FY(Actual SADRs)	FM(Actual SADF	Tmt DMIS ID(Ac	MEPRS3 Code(/	Tmt DMIS ID Nar	Tmt DMIS ID	Encounters(Infer	Encounters(Actu	Total Encounter	Percent C
2005	1	0001	BAA	FOXAHC-REDST	A	29	736	765.00	96
2005	1	0001	BAL	FOXAHC-REDST	A	2	41	43.00	95
2005	1	0001	BBA	FOXAHC-REDST	A	4	150	154.00	97
2005	1	0001	BDA	FOXAHC-REDST	A	26	446	472.00	94
2005	1	0001	BFD	FOXAHC-REDST	A	10	300	310.00	96
2005	1	0001	BFE	FOXAHC-REDST	A		70	70.00	100
2005	1	0001	BFF	FOXAHC-REDST	A		127	127.00	100
2005	1	0001	BGA	FOXAHC-REDST	A	353	3,222	3,575.00	90
2005	1	0001	BHB	FOXAHC-REDST	A	1	21	22.00	95
2005	1	0001	BHC	FOXAHC-REDST	A	1	290	291.00	99
2005	1	0001	BHF	FOXAHC-REDST	A		124	124.00	100
2005	1	0001	BHG	FOXAHC-REDST	A	9	176	185.00	95
2005	1	0001	BJA	FOXAHC-REDST	A	1	1	2.00	50
2005	1	0001	BLA	FOXAHC-REDST	A	1	372	373.00	99
2005	1	0001	BQQ	FOXAHC-REDST	A	1		1.00	
2005	1	0001	FBN	FOXAHC-REDST	A	4	61	65.00	93
2005	1	0003	BAA	LYSTERAHC-FT.	A	19	208	227.00	91
2005	1	0003	BAB	LYSTERAHC-FT.	A	2	68	70.00	97
2005	1	0003	BAL	LYSTERAHC-FT.	A		115	115.00	100
2005	1	0003	BCB	LYSTERAHC-FT.	A	10	411	421.00	97
2005	1	0003	BDA	LYSTERAHC-FT.	A	1	183	184.00	99
2005	1	0003	BEA	LYSTERAHC-FT.	A	1	192	193.00	99
2005	1	0003	BFB	LYSTERAHC-FT.	A	3	341	344.00	99
2005	1	0003	BFE	LYSTERAHC-FT.	A		98	98.00	100
2005	1	0003	BFF	LYSTERAHC-FT.	A		111	111.00	100
2005	1	0003	BGA	LYSTERAHC-FT.	A	4	1,241	1,245.00	99
2005	1	0003	BHA	LYSTERAHC-FT.	A	34	1,575	1,609.00	97
2005	1	0003	BHC	LYSTERAHC-FT.	A		260	260.00	100
2005	1	0003	BHD	LYSTERAHC-FT.	A		53	53.00	100
2005	1	0003	BHF	LYSTERAHC-FT.	A		103	103.00	100
2005	1	0003	BHG	LYSTERAHC-FT.	A	1	98	99.00	

Less than 100% when compared with appointme

MHS-wide SADR to Appointment Ambulatory Reporting Compliance
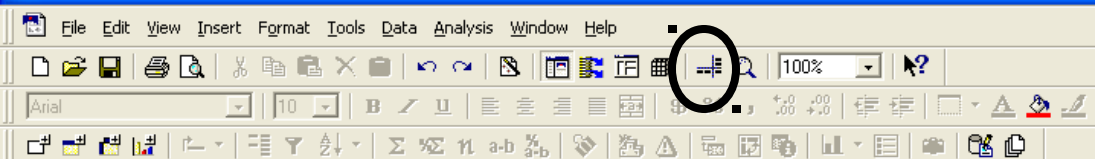
Number of Missing Ambulatory SADRs

Using M2 to Analyze Data

- M2 provides a nifty tool for analyzing data
  - Slice and Dice
  - "L" taking a nap
  - Ca

- Filter

- Make crosstabs

- Sort

- Apply Calculations
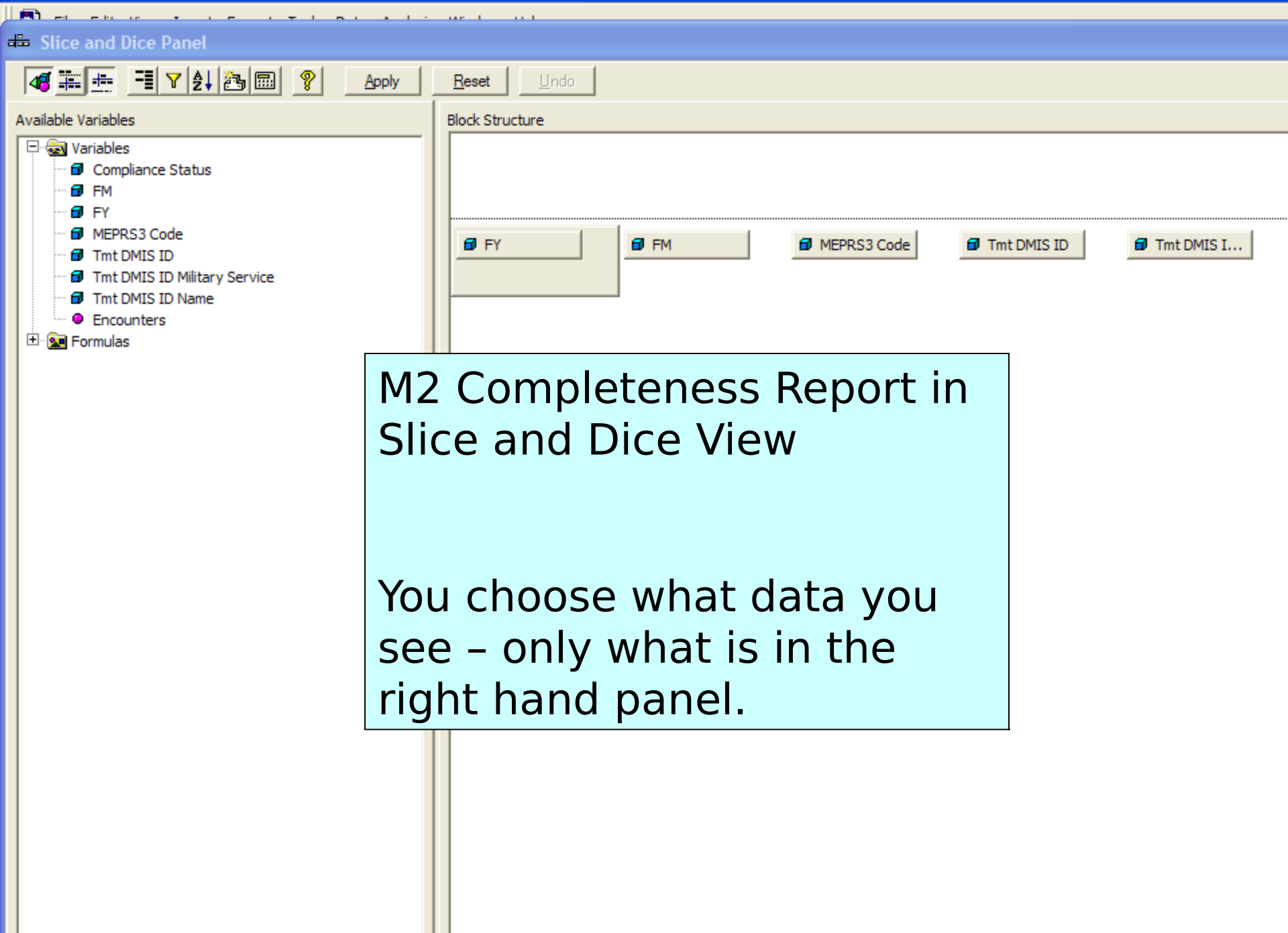
- etc

Wisdom course for detailed training

Hitting the slice and dice icon brings you to a "panel" where you make changes to the presentation of the data you've just retrieved.

Slice and Dice Panel

Apply   Reset   Undo

Available Variables

- Variables
  - Compliance Status
  - FM
  - FY
  - MEPRS3 Code
  - Tmt DMIS ID
  - Tmt DMIS ID Military Service
  - Tmt DMIS ID Name
  - Encounters
- Formulas

Block Structure

| FY | FM | MEPRS3 Code | Tmt DMIS ID | Tmt DMIS I... |

M2 Completeness Report in Slice and Dice View

You choose what data you see – only what is in the right hand panel.

Which clinics are missing the most SADRs

•Remove all data elements except MEPRS code and number of encounters

•Apply a sort to number of encounters

Clinics with the most missing SADRS

Two MEPRS Codes make up ~ half of what's missing!

Clinic	Missing SADRs	% of Total Missing
Primary Care	248,664	**24%**
Family Practice	232,662	**23%**
Pediatrics	66,930	6%
All Other Clinics	484,458	47%
Total Missing (05)	1,032,714	100%

Using M2 to Analyze Data

- Slice and Dice
  - Manipulations in slice and dice do not affect the underlying data cube
  - Can "do" and "undo" to your heart's content
  - Much more complex functionality taught in Wisdom Course
- Most Data Quality corporate documents are built with slice and dice in mind
  - Extra data elements included to help study / solve problems with data
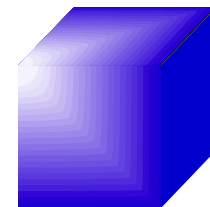
Compliance Action Report

tma.rm.dq.fy****.dcop.rep.comp.actionrep**

– Must be updated by individual users

– Like appt benchmark rpt but by provider, appt

– List of missing SADRs and lost earnings under PPS; by appointment

MTF

FY & FM

Provider ID & Clinic

Appointment ID

Missing Encounters

Lost PPS Earnings

Standard Ambulatory Data Record
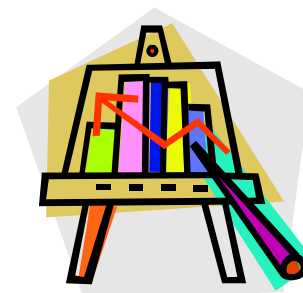
- Action Report -- Compliance
  - "Record ID" is appointment ID; same as in CHCS, ADM, AHLTA, etc..
  - Provider ID & MEPRS Code are from appointment record
  - Number of encounter is "actual missing records"
  - PPS Earnings estimated by applying PPS rates to estimated RVUs for the case (based on avg. RVUs in that clinic, SDS or not, and type of provider)

File   Edit   View   Insert   Format   Tools   Data   Analysis   Window   Help

100%

Report Title

	A	F	N
ADM	135,736	46,271	83,920
BED	455,844	133,606	266,560
DSP	135,677	46,311	83,809
IPV	243,846	21,689	103,802
OPV	13,785,090	6,667,019	7,962,777

Data | **Map**

Variables
- FM
- FY
- Tmt DMIS ID Military Se
- Workload Category
- Work Amount

Formulas

Retrieve

You use this dialog box to retrieve documents from the repository. Right-click on document(s) for additional commands.

☐ Show only this category of documents: <No Category>

Name	Categories	Owner	Schedule	S
tma.rm.dq.fy08.dcop.unspecified.provspec.rep	TMA	TMAPUB12	No	1
tma.rm.dq.fy08.dcop.ungroupable.apg.rep	TMA	TMAPUB12	No	1
tma.rm.dq.fy08.dcop.rep.comp.wwr.rep	TMA	TMAPUB12	No	1
tma.rm.dq.fy08.dcop.rep.comp.apptbench.rep	TMA	TMAPUB12	No	1
tma.rm.dq.fy08.dcop.rep.comp.actionrep.rep	TMA	TMAPUB12	No	1
tma.rm.dq.fy08.dcop.percent.ahlta.rep	TMA	TMAPUB12	No	1
tma.rm.dq.fy08.dcop.invalid.provid.rep	TMA	TMAPUB12	No	1
tma.rm.dq.fy07.pdtsrx.directcare.rxcost.rep	TMA	TMAPUB12	No	1
tma.rm.dq.fy07.dcop.unspecified.provspec.rep	TMA	TMAPUB12	No	1
tma.rm.dq.fy07.dcop.ungroupable.apg.rep	TMA	TMAPUB12	No	1

☑ Open on Retrieval   Properties...   Retrieve   Delete...   More>>   Close   Help

File   Edit   View   Insert   Format   Tools   Data   Analysis   Window   Help

100%

FY08 Ambulatory Reporting Compliance, Action Report

Date

11/1

To refresh, hit the Refresh Icon or select Refresh Data from the Data drop down menu

DMIS ID

Current Lost Earnings:

Data | Map

- Variables
  - Compliance Status
  - FM
  - FY
  - MEPRS3 Code
  - Provider ID
  - Record ID
  - Service Date
  - Tmt DMIS ID
  - PPS Potential Earnings
- Formulas

MEPRS3 Code	Provider ID	Record ID	Tmt DMIS ID	Service Date	FY	FM	Compliance Sta	PP

Enter or Select Values

OK

Enter DMISID (e.g. 0001)

Cancel

Help

Values...

File   Edit   View   Insert   Format   Tools   Data   Analysis   Window   Help

100%

Report Title

Data | Map

Variables
- Compliance Status
- FM
- FY
- MEPRS3 Code
- Provider ID
- Record ID
- Service Date
- Tmt DMIS ID
- Encounters
- PPS Potential Earnings

Formulas

Compliance Sta	FM	FY	MEPRS3 Code	Record ID	
I	12	2007	BEA	17348297	0
I	11	2007	BEF	17229598	0
				16798106	
				17150604	
				17357884	
				17438445	
				16930685	
				17352240	
I	2	2007	BIA	16289060	
I	2	2007	BIA	16296135	
I	2	2007	BIA	16300933	
I	2	2007	BIA	16300962	
I	2	2007	BIA	16301025	
I	2	2007	BIA	16308591	
I	2	2007	BIA	16315453	
I	2	2007	BIA	16315546	
I	2	2007	BIA	16317252	
I	2	2007	BIA	16320176	
I	2	2007	BIA	16320199	
I	2	2007	BIA	16333279	

After entering your DMISID:

Kept Appointments with No SADR

File Edit View Insert Format Tools Data Analysis Window Help

100%

Data | Map

Variables
- Compliance Status
- FM
- FY
- MEPRS3 Code
- Provider ID
- Record ID
- Service Date
- Tmt DMIS ID
- Encounters
- PPS Potential E
Formulas

Report Title

MEPRS3 Code	Encounters	PPS Potential E:
BBA	3,271	$169,317.33
BBF	913	$93,104.84
BGA	1,186	$65,851.41
BIA	278	$49,318.55

Surgical Clinics, Primary Care, ER

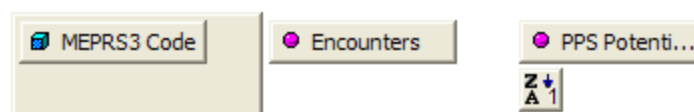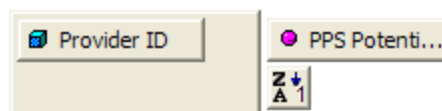|		
BBD	272	$31,327.74
BEF	463	$26,296.83
BFD	388	$25,148.42
BFE	336	$19,502.10
BDA	225	$12,927.58
BHA	248	$8,689.90
BFC	111	$8,089.55
BFF	137	$6,994.07
BHG	68	$6,078.75
BAK	37	$5,772.89
BAA	66	$4,246.26
BAR	27	$3,982.80
BLA	84	$3,387.18
BDC	40	$3,346.67
BAP	34	$3,214.80
BBI	36	$2,332.98
BHD	44	$2,032.73
BFA	28	$1,755.02

Apply   Reset   Undo

Available Variables

- Variables
  - Compliance Status
  - FM
  - FY
  - MEPRS3 Code
  - Provider ID
  - Record ID
  - Serv
  - Tmt
  - Enco
  - PPS
  - Formula

Block Structure

Provider ID   PPS Potenti...

Back to slice and dice to look at lost earnings by provider

BusinessObjects - Document5 - [funkw] - [Document5]

File Edit View Insert Format Tools Data Analysis Window Help

Data | Map

Variables
- Compliance Status
- FM
- FY
- MEPRS3 Code
- Provider ID
- Record ID
- Service Date
- Tmt DMIS ID

Report Title

Provider ID	PPS Potential Ea
	$299,098.19
	$33,204.07
	$21,487.22
	$20,731.46
	$11,734.49

- "By Provider" list of missed earnings.

- Identifiers covered up

- EACH ROW IS A PROVIDER!…….

- The first provider listed needs to submit 300K worth of SADRs!

	$3,392.39
	$3,335.16
	$3,237.26
	$2,956.70
	$2,838.23
	$2,802.85
	$2,802.71
	$2,725.60
	$2,396.47

Available Variables

Block Structure

- Variables
  - Compliance Status
  - FM
  - FY
  - MEPRS3 Code
  - Provider ID
  - Re...
  - Se...
  - Tm...
  - En...
  - PP...
- Formu...

| Provider ID | Record ID | PPS Potenti... |

Apply   Reset   Undo

Back to slice and dice to look at which SADRs are missing.

File   Edit   View   Insert   Format   Tools   Data   Analysis   Window   Help

Report Title

Provider ID	Record ID	PPS Potential Ea
	17348297	$445.31
	17229598	$377.52
	17150604	$353.39
	16798106	$353.39
		82.74
		82.74
		93.92
		93.92
		81.71
		81.71
		81.71
		81.71
		81.71
		81.71
		81.71
	16987066	$181.71
	16998522	$181.71
	17014514	$181.71
	16317252	$181.71
	16720951	$181.71
	17267148	$181.71
	17275343	$181.71
	16672104	$181.71
	16333279	$181.71
	16352477	$181.71
	16442837	$181.71
	16654520	$181.71

Data   Map

Variables
- Compliance Status
- FM
- FY
- MEPRS3 Code
- Provider ID
- Record ID

For

"Record IDs" are the appointment IENs of the missing SADRs

Use to find the missing records in ADM or AHLTA

Standard Ambulatory Data Record

Clinical Coding

- – Very important; poor coding can have serious consequences
- – Coding problems have been cited repeatedly by auditors
- – Quality of coding is difficult to analyze in large scale but easy querying and "record IDs" are helpful.
- – Ungroupable APG Report (like DRG Report) available (tma.rm.dq.fy**.dcop.ungroupable.apg)
- – UBU coding guidance available on the web.

Clinical Coding

- Queries can be written in M2 to look at "encounter level" data
  - Coding on each individual record
- Include Record ID
  - To keep data at "record level"
  - To enable staff to find problem records and fix.
- Include Diagnosis Codes, E&M Code, Procedure Code, Clinic, Provider and Other Detail.
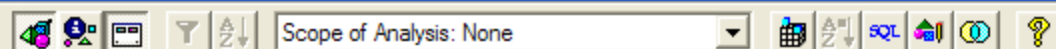
Scope of Analysis: None

Classes and Objects

- Eligibility (DEERS/MCFAS)
- TRICARE Relationships (DEERS)
- Health Care Services
  - Case Management
  - Direct Care
    - Ancillary Services
    - Inpatient Admissions (SIDR)
    - Professional Encounters (SADR)
      - Professional Encounters Summary
      - FY03 Professional Encounters
      - FY04 Professional Encounters
      - FY05 Professional Encounters
      - FY06 Professional Encounters
      - FY07 Professional Encounters
      - FY08 Professional Encounters
        - Aggregate APG Weight
        - APC Aggregate Weight
        - APC, E&M Weight
        - APC Proc 1 Weight
        - APC Proc 2 Weight
        - APC Proc 3 Weight
        - APC Proc 4 Weight
        - Days Since Most Recent GWOT Depl
        - E&M Procedure RVU
        - Encounters
        - Full Cost
        - Full Cost Clin Salary
        - Full Cost Lab
        - Full Cost Other
        - Full Cost Other Ancillary
        - Full Cost Other Salary
        - Full Cost Pharmacy
        - Full Cost Rad
        - Historical RVU
        - Individual Work RVU
        - Organizational Work RVU
        - PPS Earnings
        - PPS Market Value
        - PPS Potential Earnings
        - PPS Potential Market Value

Result Objects

- Encounters
- Procedure 4
- Simple RVU
- Tmt DMIS ID
- E&M Code
- FM
- Record ID
- Person ID
- Procedure 1
- Provider ID

Conditions

- Ambulatory Proc Visit Flag Equal to 'Y'

File   Edit   View   Insert   Format   Tools   Data   Analysis   Window   Help

100%   ▾   ▸?

Data   Map

Variables
- E&M Code
- FM
- MEPRS3 Code
- Person ID
- Procedure 1
- Procedure 2
- Procedure 3
- Procedure 4
- Provider ID
- Record ID
- Tmt D...
- Encou...
- Histori...
- Simple...
Formulas

Report Title

Encounters	Tmt DMIS ID	Record ID	Procedure 1	Procedure 2	Procedure 3	Procedure 4
1	0005	2790239	58661	00840	99199	
1	0005	2795614	42830	00170	99199	69436
1	0005	2796933	30520	00160	99199	
1	0005	2797498	29826	01630	99199	
1	0005	2797584	11406	00300	99199	
1	0005	2797652	11406	00300	99199	
1	0005	2797816	29807	01630	99199	
					01400	G0289
					99199	
					99199	
					99199	
					99199	
					99199	
					99199	
					99199	
					99199	
					99199	29807
					99199	
					99199	
					00840	99199
					99199	
					99199	
					99199	
1	0005	2803238	29807	29822	01630	99199
1	0005	2803490	29880	01400	99199	
1	0005	2804498	30520	30930	00160	99199
1	0005	2804744	59812	01965	99199	

Report of individual SADRs.

Includes procedures and diagnosis codes

MEPRS Code

Provider ID

Record ID

Clinical Codes used in RVU Assignment

- Done in the MDR
- Relies on clinical coding by the MTF
- Match SADR to MHS Weight table based on procedure codes.
- For each procedure, assign work RVU from weight table; unless:
  - E&M code on the same record as a significant procedure
  - Unspecified provider specialty (depends on the RVU field)
- Some RVU fields use slight modifications to these rules.

MDR Adds RVUs to SADR

	From SADR	From Weight Table
Procedure 1	73200	1.09
Procedure 2	76376	0.20
Procedure 3	99148	0.48
Procedure 4	99199	0.0
E&M Code	99499	0.0
Provider ID	NOELJM	
MEPRS3 Code	BDA	

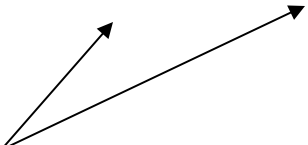Sum of each E&M or procedure's RVUs = Simple RVU (1.77)

How are RVUs assigned?

- Units of Service are supposed to be incorporated into RVU assignment, but not in SADR
  - Critical missing data elements
  - Leads to a systematic understatement of work MHS-wide
  - PT, Mental Health, Dermatology, are especially affected.

How are RVUs assigned?

- MHS Weight Table
  - Mostly contains CMS weights
  - Modified for unique MHS reporting of pre and post operative visits (needed to not 'double credit)
  - Some additions for things CMS doesn't cover (i.e. telephone consults)
- Many questions come in about why MTFs seem to get less credit than purchased care, for the same procedure code...
  - Not so! It only seems that way!

RVUs from MHS Weight Table

CPT	Description	DC - Work	PC – Work
42820	TONSILLECTOMY & ADENOIDECTOMY; YOUNGER THAN 12YRS	3.38	4.17

Direct Care gets less credit for CPT 42820 than purchased care, on the surface

File   Edit   View   Insert   Format   Tools   Data   Analysis   Window   Help

100%

Data | **Map**

Variables
- Diagnosis 1
- Diagnosis 2
- Diagnosis 3
- Diagnosis 4
- E&M Code
- MEPRS3 Code
- Person ID
- Procedure 1
- Procedure 2
- Procedure 3
- Procedure 4
- Provider ID
- Record ID
- Service Date
- Tmt DMIS ID
- E&M Procedure RVU
- Encounters
- PPS Earnings
- Procedure 1 RVU
- Procedure 2 RVU
- Procedure 3 RVU
- Procedure 4 RVU
- Simple RVU

Formulas

Report Title

Person ID	Service Date	Procedure 1	E&M Code	Procedure 1 RVU	E&M P
1134215395	10/30/2007	99024	99499	0.7400	
1134215395	10/31/2007	29881	99499	5.9100	
1134215395	11/09/2007	99024	99499	0.7400	
			Sum:	7.3900	

Typical MHS-coded same day surgery

- Separate records for pre-op/post-op and surg

  – Private sector RVUs *include* the pre and post op work!

  – MHS weight table modified so that the procedure record only gets the weight for the procedure; pre and post ops earn weight

Standard Ambulatory Data Record
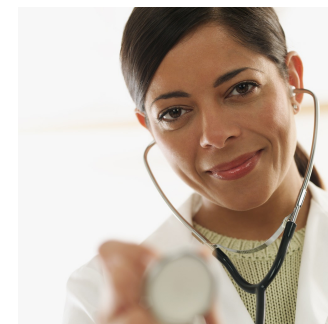
Provider Information

- Provider identifiers are only unique to each CHCS Host
- Provider Table in CHCS
- Name, specialty, HIPAA taxonomy, etc.
- Some historic problems with names & specialties
- Provider ID is assigned at the time the appointment is booked.
- Important for productivity analysis, billing, provider profiling, etc.
- 2 corporate reports in M2

Unspecified Provider Specialty

tma.rm.dq.fy**.dcop.unspecified.provspec

- Updated once per month
- Within a few days of M2 Appointment update
- Can be updated by users also

MTF & Attributes

FY & FM

MEPRS Code

w/ unspecified specialty

w/o unspecified specialty

% unspecified specialty

Encounters with Unspecified Provider Specialty Code

Legend: A, F, N
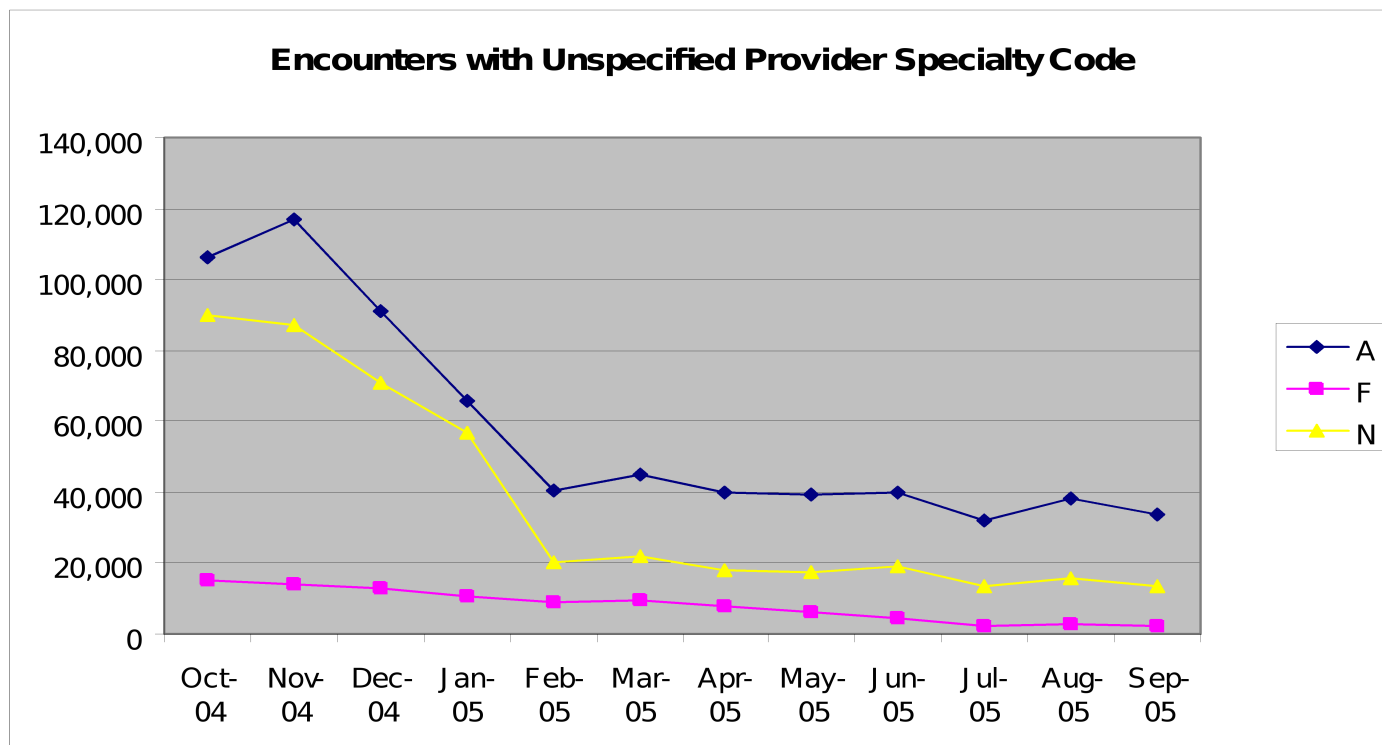
- PPS announces future plans to discontinue crediting SADRs with unspecified provider specialties (910-999)

- SAIC patch written for CHCS

- Significant Improvements made in FY05

Standard Ambulatory Data Record

Invalid Provider IDs
- – "Catch-all" identifiers used in some clinics
- – ER Doc, PT tech, Card clinic, any provider, etc.
- – Usually not too difficult to find because these IDs generally hold a large amount of workload

M2 report sorts RVUs by provider. Can review the list to see if any obvious problems appear.

Invalid Provider IDs

tma.rm.dq.fy**.dcop.invalid.provid
  – Prompted filter report
  – Lists providers with daily encounter and RVUs.

MTF & Attributes   RVUs

FY & FM

Provider ID

Invalid Provider IDs

- Report is a list of workload by provider and MTF
- Sort by descending workload
- Are the most productive providers reasonable?
  - Are they real people?
  - You CANNOT bill for "ER DOC"……… Lost TPOCS billings.
- Are the daily totals reasonable?
- Clean out provider table to remove these IDs as options.
  - Discuss with clinic/appointing staff to ensure access is not harmed, though.

100%

FY07 Invalid Provider ID

Date

1/23/

To refresh, hit the Refresh Icon or select Refresh Data from the Data drop down menu

Prompted Filter:

Data | Map

- Variables
  - Diagnosis 1
  - E&M Code
  - FM
  - FY
  - Patient Category
  - Provider ID
  - Record ID
  - Service Date
  - Tmt DMIS ID
  - Tmt DMIS ID Military Se
  - Tmt DMIS ID Name
  - Encounters
  - PPS Work RVU
- Formulas

FY	Service Date	Encounters
2007	10/10/2006	1
2007	10/11/2006	463
2007	10/12/2006	181
2007	10/18/2006	516
2007	10/19/2006	216
2007	10/21/2006	7
2007	10/25/2006	446
2007	10/26/2006	183
2007	11/01/2006	501
2007	11/08/2006	514
2007	11/09/2006	514
2007	11/28/2006	1
2007	11/29/2006	381
2007	11/30/2006	187
2007	12/06/2006	381
2007	12/07/2006	273
2007	12/13/2006	503
2007	12/14/2006	186
2007	12/20/2006	479
2007	12/21/2006	352
2007	12/27/2006	311
2007	12/28/2006	271
2007	01/09/2007	1

- Daily Encounters by one provider at one MTF.

- Hundreds of daily encounters each day!

- Mostly physicals for AD

- ~7 times the RVUs of other providers at this MTF

Laboratory and Radiology
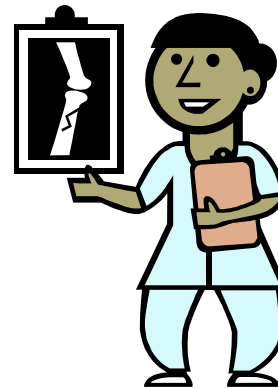
MTF Laboratory and Radiology Data Records

- What does an MTF Lab/Rad record contain?

- How is the information collected?

- Timing?

- MDR? M2?

- How is it used?

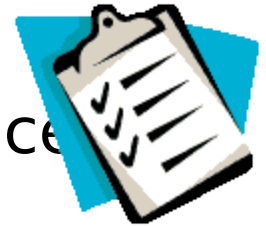- Using M2 to identify DQ problems at your MTF

Laboratory and Radiology Data Records
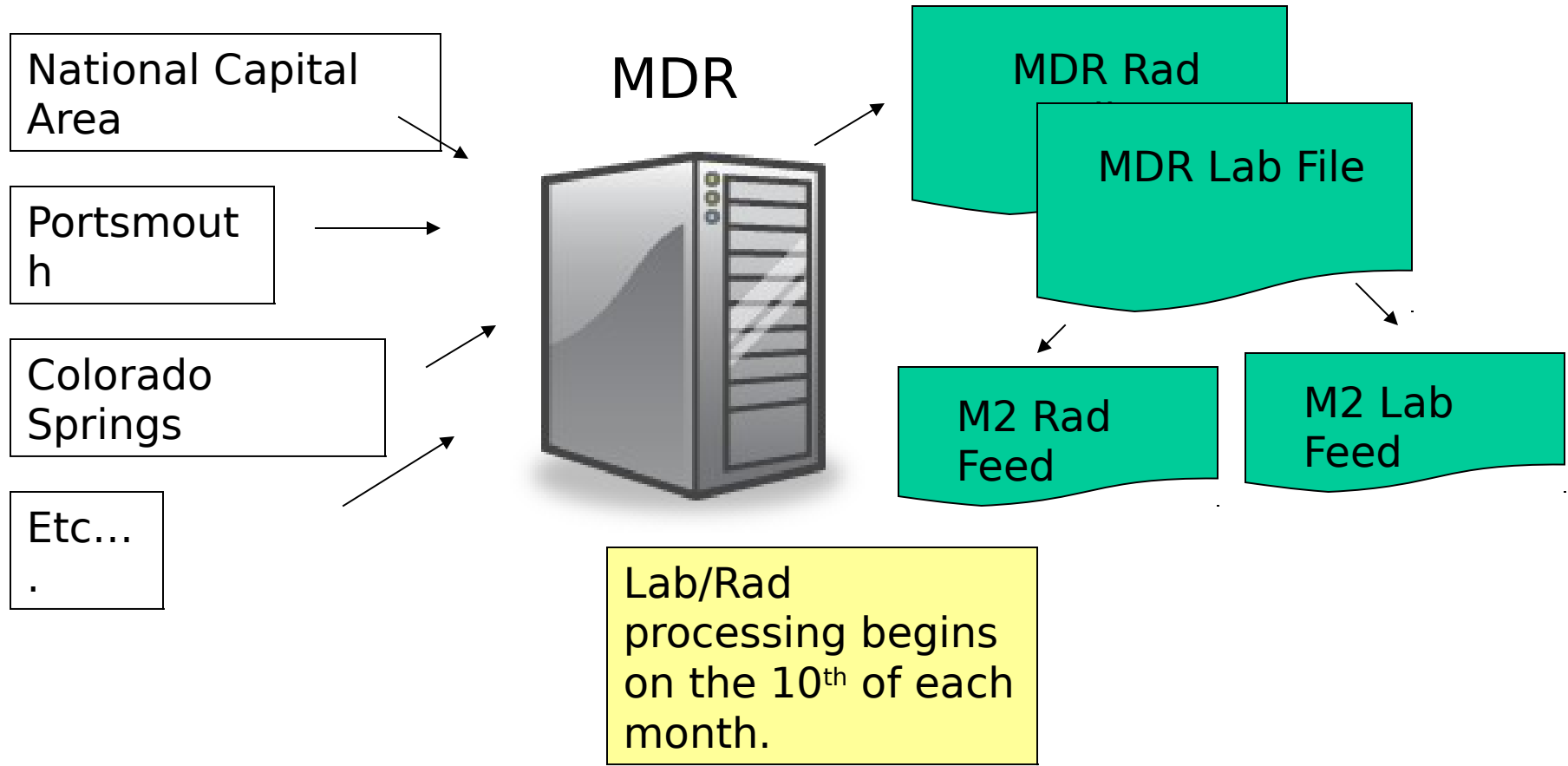
- <u>Each record represents a lab or rad entry in CHCS</u>
  - (Some records exist for line hospitals and others that use CHCS)
  - Created from CHCS laboratory and radiology data files
  - Information is primarily collected as provider's order and technicians / providers perform exams.
  - Does not include lab/rad associated with inpatient care
  - There are roughly X million lab records and Y rad records per year
  - CPT/HCPCS Coding is built into software.
  - Results not included.
  - File is sent automatically by CHCS on the 5th of each month

MTF Lab / Rad Data Records

- Information on the Lab/Rad Records
  - Patient Identifier
  - CPT/HCPCS & Modifiers, Units of Service
 - Ordering Clinic, Appointment
  - Service Date

Preparation of Lab/Rad Files in MDR & M2

National Capital Area

Portsmouth

Colorado Springs

Etc....

MDR

MDR Rad

MDR Lab File

M2 Rad Feed

M2 Lab Feed

Lab/Rad processing begins on the 10th of each month.

# MTF Laboratory & Radiology Records

- MDR Processing of MTF Lab/Rad
  - Person identification standardization
  - Application of DEERS attributes (including application of retroactive changes)
  - Addition of relative value units (RVUs)
  - Costing
  - Additional field derivations
  - Application of update records
  - Preparation of data for M2
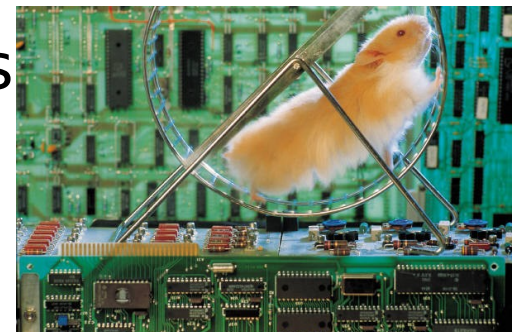
MTF Laboratory and Radiology Data Records

Uses of MTF Lab/Rad

- MTF Laboratory and Radiology Records can be tabulated to generate important management information

- Records can also be used at person level; to improve health care, identify potential case management candidates, etc.
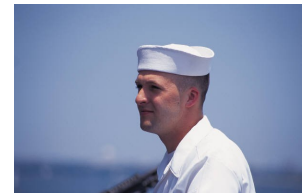
Example of Tabulated Lab Records for FY07:

Top 10 Laboratory procedures performed by MTFs in FY07

CPT	Description	Tests
85025	CBC	1,810,549
80061	Lipid Panel	951,170
82947	Blood Glucose	881,850
81003	Urinalysis w/o Microscop	838,799
84443	Thyroid Test	805,570
86701	HIV Test	779,359
80053	Comp Metabolic Panel	723,259
81001	Urinalysis w/ Microscop	633,661
82565	Creatinine Assay	505,880
84460	Transferase	501,924

Example of Tabulated Rad Records for FY07:

Top 10 radiology procedures performed by MTFs in FY07

CPT	Description	Exams
71020	Chest X-Ray; 2 views	556,953
73630	Foot X-Ray; 3 views	162,280
73610	Ankle X-Ray; 3 views	151,729
73130	Hand X-Ray; 3+ views	104,324
73030	Shoulder X-Ray; 2 views	104,271
71010	Chest X-Ray; 1 view	104,025
73110	Wrist X-Ray; 3+ views	99,485
76092	Screening mammography, Bilateral	99,259
73560	Kneee X-Ray; 1-2 views	94,482
72100	X-Ray; Lumbar/Sacral; 2 views	88,594

Example of Tabulated Rad Records for FY07:

Top 10 clinics ordering radiology procedures performed by MTFs in FY07

Code	Ordering Clinic	Exams
BGA	Family Practice	890,266
BIA	Emergency Room	805,089
BHA	Primary Care	615,667
BEA	Orthopedics	360,745
BAA	Internal Medicine	257,316
BCB	OB/Gyn	200,916
BDA	Pediatrics	108,539
FCC	CHAMPUS Beneficiary Support	102,584
BJA	Flight Medicine	89,237
BBA	General Surgery	74,534
BHI	Immediate Care Clinic	56,989

Example of Tabulated Radiology Records:

Mammograms performed by MTFs, by age group code

| Age	2006	2007
A: 0-4		2
B: 5-14	1	9
C: 15-17	2	15
D: 18-24	96	431
E: 25-34	754	3,305
F: 35-44	10,963	45,330
G: 45-64	26,313	103,627
H: 65+	6713	24895

Important Data

Key Data Elements	Why
Patient ID	DEERS App, Disease & Case Mgmt
Procedure Codes & Modifiers, Units of Service	RVU Assignment
Ordering Information	Association with encounter (Diagnosis and Procedure, and provider) that resulted in the exam order. Practice patterns, provider profiling, clinical improvement

MTF Lab/Rad Records

Data Issues

- Completeness
  - Records automatically sent by CHCS
  - Transmission failures must be acted upon quickly.
  - Holes in the data; missing results have led to limited clinical use.
  - Holes in the data can easily be studied in M2.

Radiology Records from one MTF
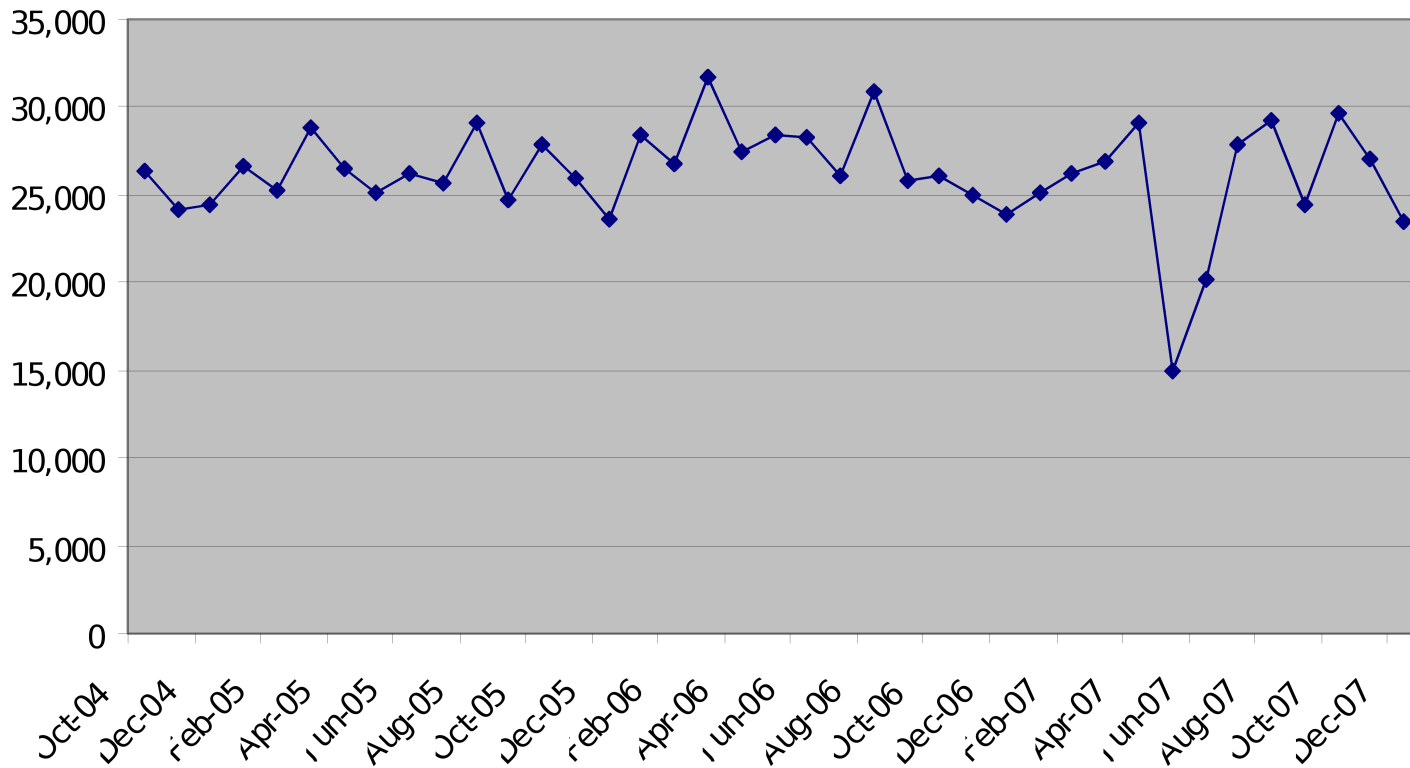
- Big Holes in the middle of FY07
- Significant problem at many MTFs
- Affects lab and rad

Worldwide Workload Report

Workload Workload Report

- What's in the Worldwide Workload Report?

- How is the information collected?

- Timing?

- MDR? M2?

- How is it used?

- Using M2 to identify DQ problems at your MTF

Worldwide Workload Report

- Monthly report of workload
  - Created from data in existing files/tables/reports in CHCS
  - Dispositions, Admissions, Days, Visits, etc.
  - Complete data is required to be reported to TMA by 10th of month for previous month.
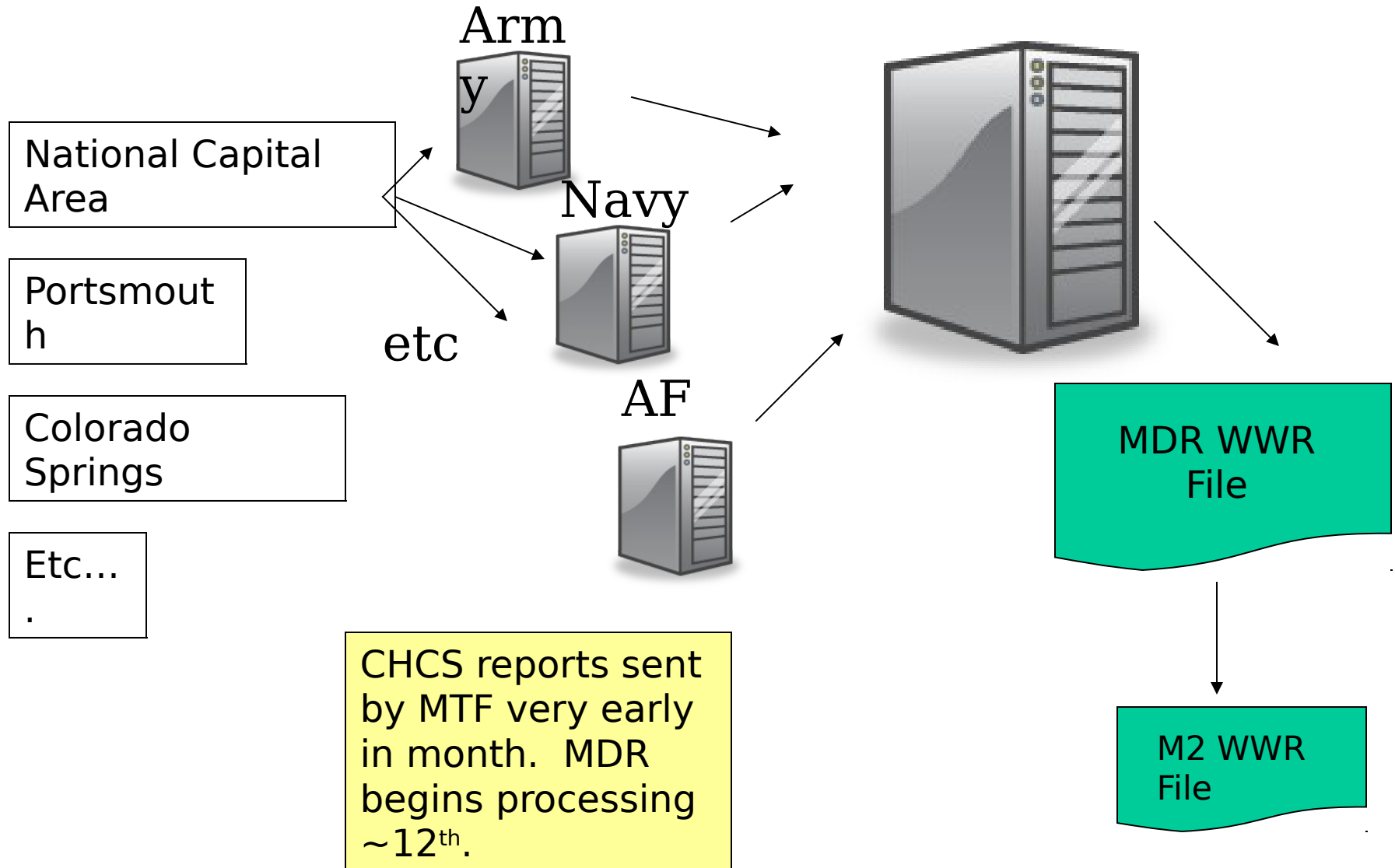 - Report goes from MTFs to Service, and then to MDR

Worldwide Workload Report

- Information on the WWR
  - MTF
  - MEPRS Code
  - Year & Month
  - Beneficiary Category
  - Type of Workload

Preparation of WWR Files in MDR & M2

National Capital Area

Portsmouth

Colorado Springs

Etc....

Army

Navy

etc

AF

MDR WWR File

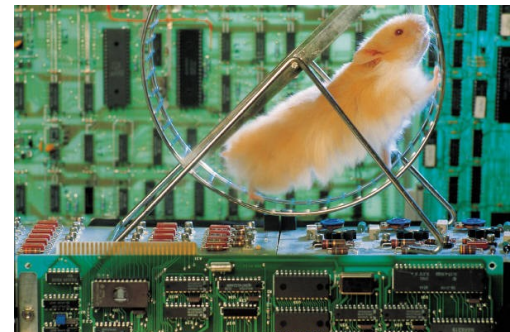M2 WWR File

CHCS reports sent by MTF very early in month. MDR begins processing ~12th.

Worldwide Workload Report

- MDR Processing of WWR
  - Minimal processing
  - Append 3 service feeds together and de-duplicate
  - Preparation of data for M2

Worldwide Workload Report

Uses of WWR
- Quickest, most complete source of dispositions, days, "count visits".
- Used for estimating other sources to completion.
- Not very useful managerially or clinically because of level of granularity.
- Good for aggregate reporting

Example of WWR:

Workload by MTF Service and Workload Type in FY07

Type	A	F	N	Total
Admissions	135,736	46,271	83,920	265,927
Bed Days	455,844	133,606	266,560	856,010
Dispositions	135,677	46,311	83,809	265,797
Count Inpatient Visits	243,846	21,689	103,802	369,337
Count Outpatient Visits	13,785,090	6,667,019	7,962,777	28,414,886

Medical Expense Performance and Reporting System

MEPRS

- What's in the MEPRS Data?

- How is the information collected?

- Timing?

- MDR? M2?

- How is it used?

- Using M2 to identify DQ problems at your MTF

Other Systems with MTF Data

- MEPRS
  - Tri-Service Financial System
  - Expense Assignment System (EAS) – recent transition to internet
  - Military Unique System designed to produce cost & full-time equivalent information, at a summary level.
  - Receives workload information from CHCS.
- Substantial coverage later in course… will touch only on issues.

Other Systems with MTF Data

- MEPRS
  - If there are costs, there should be workload and labor!
  - If there is workload, there should be costs and labor.
  - Corrections, year-end spending, and cash-based accounting wreak havoc on trends.
  - Proper time reporting must be important to MTF leadership.
  - Beware tri-service data. Sometimes policy is that services will capture data differently.

Costs should result in workload!
(Beware of monthly data!)

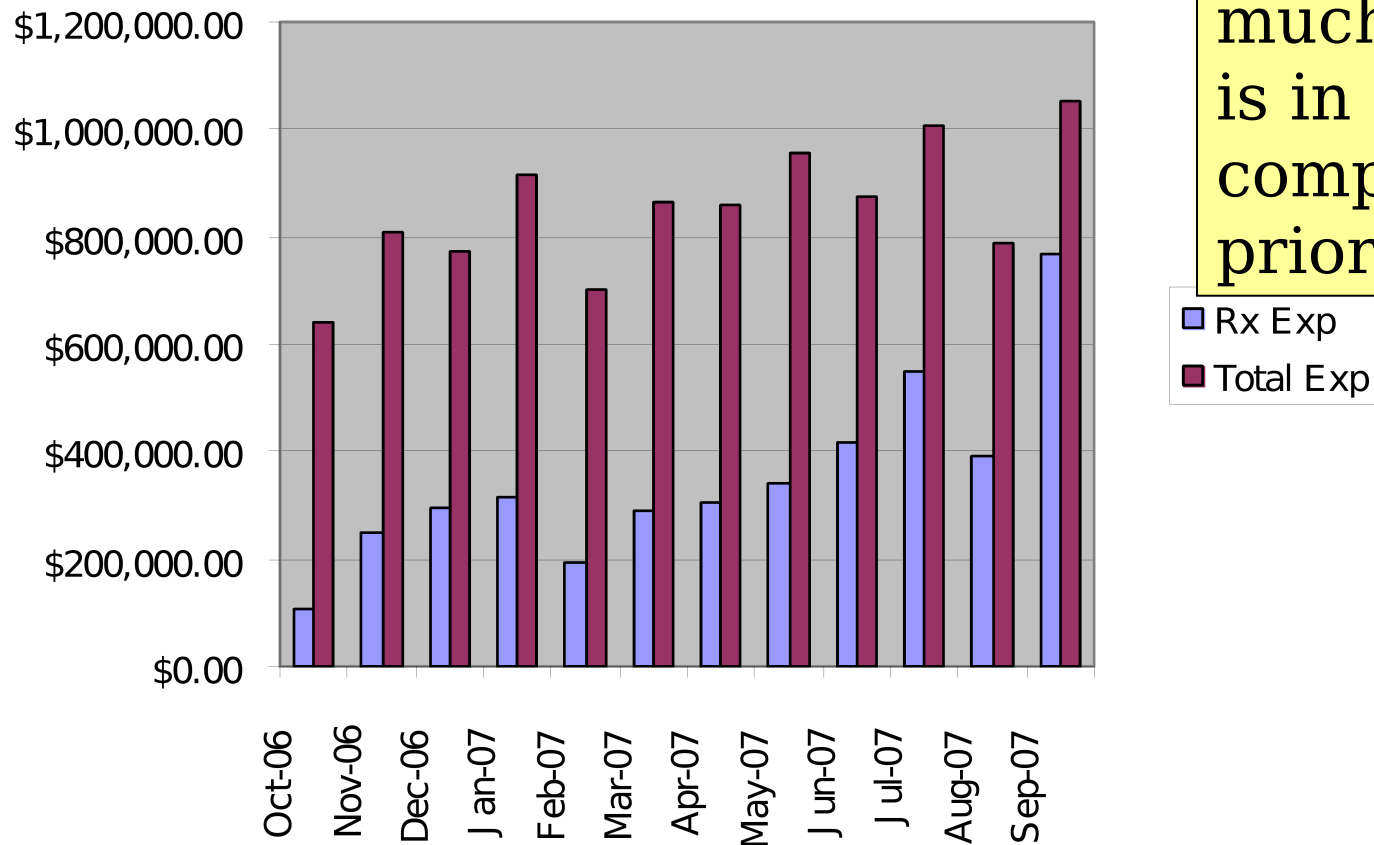| FY	FM	Dispositions	Bed Days	Total Exp	Available Clinician FTEs	Available RN FTEs
2007	1	2	4	$184,494	2	1.06
2007	2	1	1	$161,362	2	0.99
2007	3	0	0	$190,998	2	0.94
2007	4	3	12	$311,324	2	1.41
2007	5	3	3	$148,320	2	1.18
2007	6	5	11	$337,549	2	1.44
2007	7	4	6	$119,829	2	0.98
2007	8	6	9	$194,973	2	1.35
				$300,148	2	1.59
				$286,248	2	1.26
				$344,088	2	0.42
2007	12	2	3	$261,216	1.79	0.16

Costs less to treat patients than to not treat patients!

If there is workload, someone had to do it

FY	FM	Dispositions	Bed Days	Total Exp	Available Clinician FTEs	Available RN FTEs
2007	1	10	23	$56,515	0.16	0
2007	2	13	22	$62,197	0.32	0
2007	3	10	14	$157,662	0.06	0
2007	4	9	13	$64,372	0.79	0
2007	5	8	11	$29,814	0.12	0
2007	6	10	14	$39,635	0.1	0
2007	7	13	27	$50,379	0.02	0
2007	8	17	40	$102,042	0.56	0
2007	9	15	36	$137,371	0.4	0
2007	10	8	11	$34,940	0.56	0
2007	11	12	16	$35,185	0.27	0
2007	12	16	30	$89,789	0	0

Havoc in Monthly Trend Data!

Rx Expense and Total Expense for Ambulatory Clinics in FY07

Note how much larger rx is in Sep 07 compared with prior months

Havoc in Monthly Trend Data!

FY	FM	Dispositions	Bed Days	Total Exp
2007	1	45	200	$5,639,371.42
2007	2	40	188	($3,010,001.83)
2007	3	44	224	$1,362,895.50
2007	4	55	374	$1,137,152.31
2007	5	51	318	$868,267.19
2007	6	66	321	$991,846.96
2007	7	40	145	$602,137.16
2007	8	44	151	$764,113.54
2007	9	31	144	$660,709.34

Beware Across Service Lines Ambulatory Obstetrics Expense

| MEPRS Code	Army MTFs	AF MTFs	Navy MTFs	All MTFs
BCA - Family Planning	3,180,304	145		12,774
BCB - Gynecology	80,121,683	81,008,784	123,864,534	926,449
BCC - Obstetrics	81,448,763	31,887,059		532,385
BCD - Breast Care	1,182,718	381	7,066,993	25,010
BCX - OB/GYN Cost Pool	-	2,109		-
Grand Total	664,253	358,628	473,737	1,496,618

Pharmacy Data Transaction Service

Pharmacy Data Transaction Service (PDTS) Record

- What does a PDTS record represent?

- How is the information collected?

- Timing?

- MDR? M2?

- How is it used?

- Using M2 to identify DQ problems at your MTF

PDTS Records

- <u>Each PDTS record represents an outpatient prescription for an MHS-eligible beneficiary.</u>
  - Includes MTF, Retail and Mail Order Prescriptions
  - Will focus on MTF data for this course
  - Created from data collected during the <u>*required drug utilization review*</u> (DUR) check
  - There are roughly 120,000,000 PDTS records per year
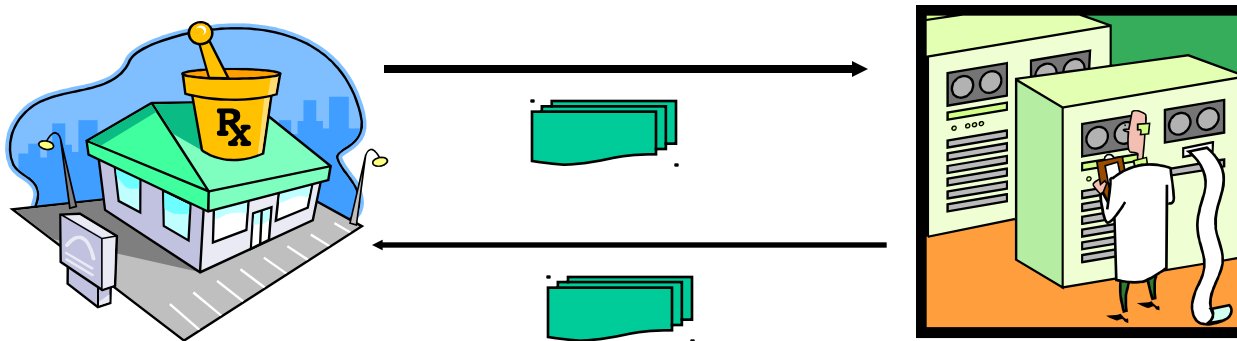
- Rx ordered at MTF in CHCS

- Information stored in Rx file locally

- Real time DUR Check
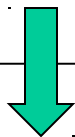
- PDTS receives DUR requests from MTFs (and TMOP and Trrx)

- Checks against rx history files to determine whether it's okay to dispense

- Responds back to Pharmacies with "go" or "no go"

Source for MEPRS

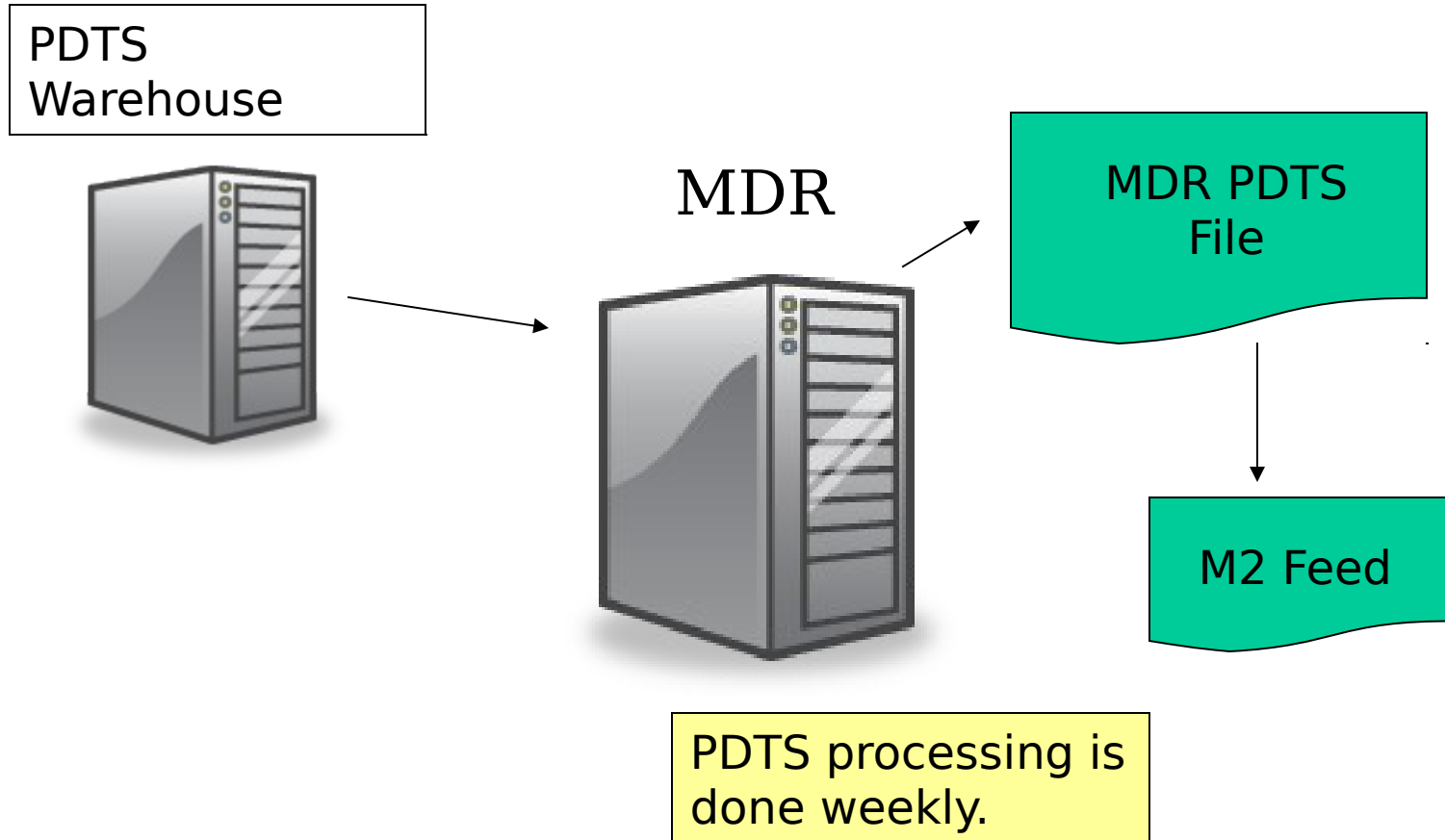Source for MDR/M2 PDTS Data Table

Pharmacy Data Record

- Information on the PDTS records
  - Patient Identifier
  - Sponsor Information
  - National Drug Code, Therapeutic Class
  - Dispensing Date
  - Quantity, Days Supply
  - Pharmacy Identifier
  - Prescriber DEA Number

Preparation of PDTS Files in MDR & M2

PDTS Warehouse

MDR

MDR PDTS File

M2 Feed

PDTS processing is done weekly.
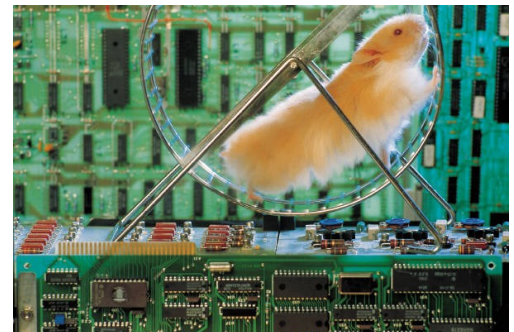
Pharmacy Data Record

- MDR Processing of PDTS Record
  - Person identification standardization
  - Application of DEERS attributes (including application of retroactive changes)
  - Addition of "ordering information" (appt ID, MTF and provider)
  - Clean up of 'quantity' for certain NDC
  - Additional field derivations
  - Application of update records
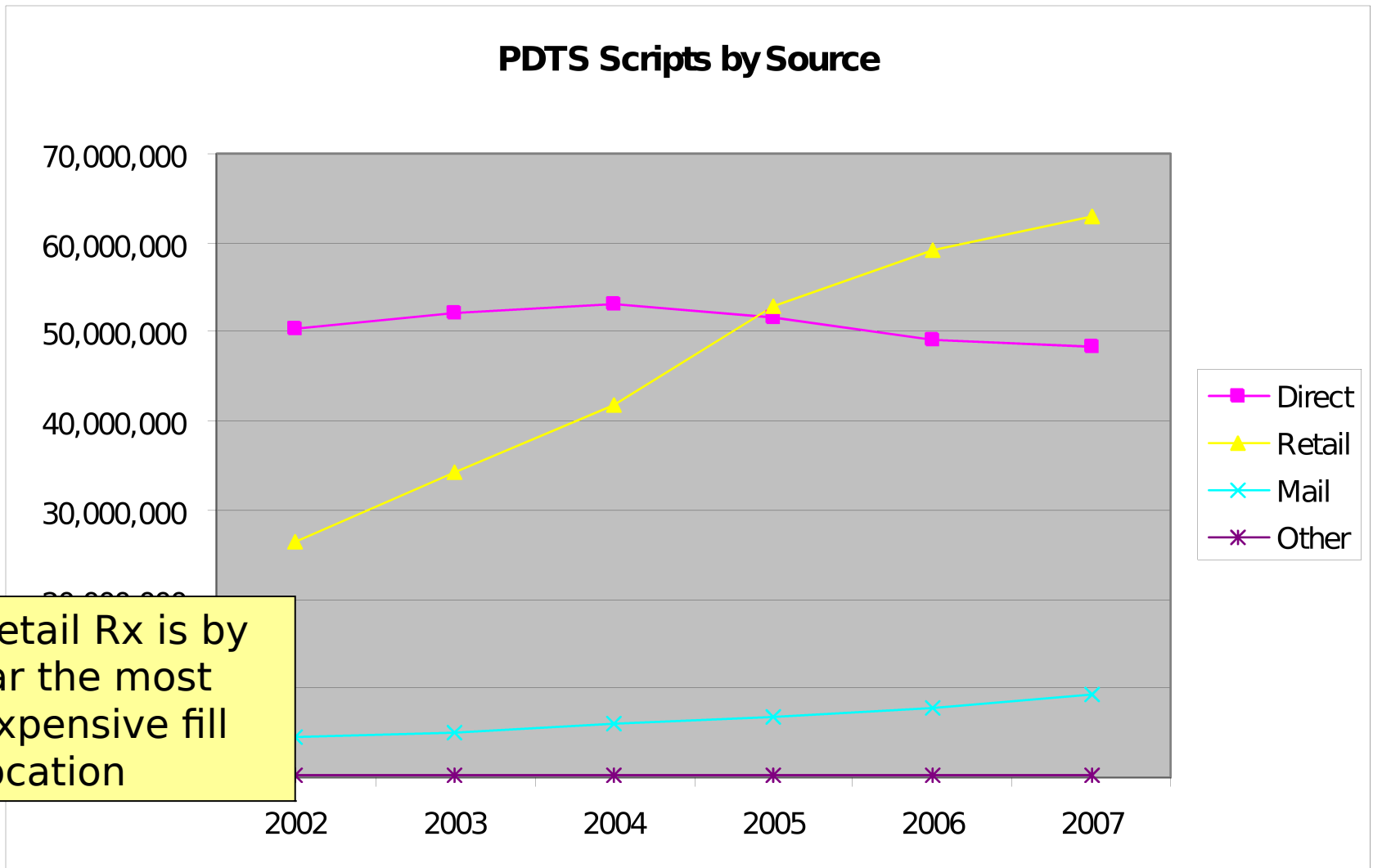 - Preparation of data for M2

Pharmacy Data Record

Uses of PDTS
- – PDTS can be tabulated to generate important management information
- – PDTS can also be used at person level; to improve health care, identify potential case management candidates, etc.

Trend in Prescriptions Filled – by Source

PDTS Scripts by Source

Retail Rx is by far the most expensive fill location

Example of Tabulated PDTS Data:

Top 10 Drugs Prescribed by MTFs in FY07

NDC	Product Name	Scripts
00173045301	FLONASE	777,678
00172208380	HYDROCHLOROTHIAZIDE	630,752
53746013705	IBUPROFEN	610,054
51660052605	LORATADINE	505,443
62856024390	ACIPHEX	395,242
00006074082	ZOCOR	344,078
00069551066	ZYRTEC	306,267
62856024330	ACIPHEX	297,824
00024542131	AMBIEN	259,050
62175011843	OMEPRAZOLE	258,012

Example of Tabulated PDTS Records:

Prescriptions by MTFs, by age group code

Age	2004	2005	2006	2007	2008
A: 0-4	2,134,229	1,962,177	1,863,058	1,783,851	518,698
B: 5-14	2,543,066	2,394,545	2,196,966	2,099,655	561,163
C: 15-17	807,494	773,298	726,655	702,401	180,762
D: 18-24	6,034,855	5,927,900	5,733,498	5,837,254	1,579,952
E: 25-34	5,886,925	5,818,567	5,597,464	5,643,667	1,573,450
F: 35-44	6,026,496	5,783,341	5,407,871	5,278,481	1,444,452
G: 45-64	14,773,406	14,373,122	13,740,277	13,460,772	3,730,398
H: 65+	15,030,703	14,486,699	13,866,074	13,645,865	3,834,151

Example of Use of Person Level PDTS Data:

PDTS Record linked to encounter where the script was ordered

PDTS Record	
Treatment DMIS ID	0089-Bragg
Ordering Record ID	15513083
Ordering Site	0089-Bragg
Ordering MEPRS Code	BAB – Allergy
Fill Date	10/04/2006
Therapeutic Class	Ethanolamine Derivatives (e.g. Benadryl)

SADR ENCOUNTER	
Treatment DMIS ID	0089
Record ID	15513083
Procedure 1	95010-Percutaneous Tests, Imm Reaction
Procedure 2	94760-Pulse Oximetry
Procedure 3	94010-Spirometry
E&M Code	99245-Office Consult
Diagnosis 1	99560-Anaphylacti Shock; Food NOS
Diagnosis 2	9957-Adverse Reaction
Diagnosis 3	4779-Allergic Rhinitis
Diagnosis 4	9950-Anaphylactic Shock
MEPRS 3 Code	BAB-Allergy
Provider ID	MCCLEB

Important Data

Key Data Elements	Why
Patient ID	Finding patients, DEERS App, Disease & Case Mgmt, MERHCF, GWOT, PPS, Balanced Score Card, Billing
NDC	Identification of type of drug
Quantity	How many
Dispensing Date	Clinical Application
Ordering Info	Linking to SADR for provider or prescribing information

PDTS Data Quality Issues

- Pre-defined Units and Drug Codes don't always go together.
  - Ex. Birth control pills dispensed in a pack of 28. Is this a unit of "1" or "28"?
  - Rounding issues and bulk issues
- Local pricing is not reliable
  - PDTS re-prices everything unless the MTF has set the "local pricing flag" to yes.

Most Expensive Drug Report

tma.rm.dq.fy**.pdtsrx.directcare.rxcost.rep

– Prompted filter report

MTF & Attributes

NDC & Name

Cost

Days Supply/Qty

Cost per Day

Cost per Unit

File Edit View Insert Format Tools Data Analysis Window Help

FY06 Pharmacy Pricing Table Errors

Product Name	NDC	Therapeutic Cla:	Full Cost	Days Supply, Su	Number of Scrip	Cost Per Script
ADVAIR DISKUS	00173069600	121200	$111,716.46	450	13	8,594
SEREVENT DISKUS	00173052100	121200	$20,074.86	150	3	6,692
ADVAIR DISKUS	00173069702	121200	$55,173.72	360	10	5,517
ADVAIR DISKUS	00173069500	121200	$14,687.46	61	3	4,896
SEREVENT DISKUS	00173052100	121208	$12,100.86	90	3	4,034
ADVAIR DISKUS	00173069600	121208	$65,494.84	690	17	3,853
ADVAIR DISKUS	00173069500	121208	$10,717.92	211	8	1,340
FLOVENT	00173049500	680400	$26,282.40	690	20	1,314
SURVANTA	00074104008	920000	$1,226.96	30	1	1,227
				180	2	1,120
				1,864	65	865
				60	2	725
				275	11	687
				30	1	687
				1,461	49	587
				180	3	531
				480	8	492
				198	2	465
				30	1	411
				300	6	399
				960	32	395
				30	1	381
				17,258	519	379
				180	6	342
ARICEPT	62856024590	120400	$922.86	270	3	308
ARICEPT	62856024690	120400	$305.82	90	1	306
KENALOG	00003050162	840600	$305.55	30	1	306
AVANDIA	00029315920	682028	$12,077.28	3,045	41	295
RETROVIR	00173010855	081808	$276.28	28	1	276
MIRENA	50419042101	320000	$275.43	30	1	275
RIBASPHERE	49884085656	081832	$271.81	30	1	272
PRAVACHOL	00003515405	240608	$253.35	90	1	253

This MTF has it's local pricing flag on.

These prices came from MTF

Asthma medication is not that expensive!

Problems with pre-defined units and NDC.

Data   Map

Variables
- NDC
- Product Name
- Therapeutic Class Code
- Days Supply, Sum
- Full Cost
- Number of Scripts
Formulas

Wrap Up
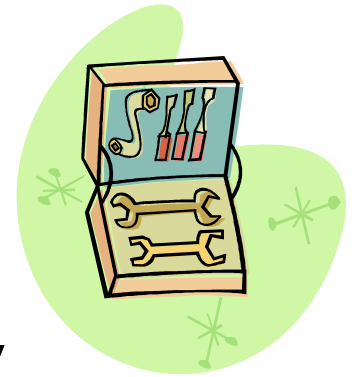
- M2 is a useful part of a data quality manager's tool-kit
  - Provides a good source for record level data
  - Uses the same record identifiers as the source systems, to allow things to get fixed faster
  - Contains lots of different data files from the MTF
  - Corporate Reports are easy to use.
- Real time tools are still helpful and needed

Wrap Up

- WISDOM Course for training
  - Need more than software training
  - Most important to understand the underlying data
- For M2 accounts:
  - 1-800-600-9332
- Be sure to inquire about other standardized reports and such when other speakers present!